

**DoD Joint Service
Chemical/Biological Defense Program
Committee Staff Procurement Backup Book
FY 2001 Budget Request
Procurement, Defense-Wide**



February 2000

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

DoD Joint Service Chemical and Biological Defense Program

FY 2001 Budget Request

Table of Contents..... i

Chemical and Biological Defense Program Procurement Summaryiii

P-1 Exhibit for Chemical and Biological Defense Program.....v

Budget Line Item #58 - Individual Protection (GP1000)..... 1

Budget Line Item #59 - Decontamination (PA1500).....39

Budget Line Item #60 - Joint Biological Defense Program (MA0800)53

Budget Line Item #61 - Collective Protection (PA1600).....89

Budget Line Item #62 - Contamination Avoidance (GP2000)125

THIS PAGE INTENTIONALLY LEFT BLANK

PROCUREMENT, DEFENSE-WIDE

Chemical/Biological Defense Program Summary

	(\$ in Millions)
FY 1999 Actual	295.189
FY 2000 Estimate	381.156
FY 2001 Estimate	473.936

Purpose and Scope of Work

- These funds provide for a fully integrated and coordinated Nuclear, Biological and Chemical (NBC) Defense procurement program within the Department of Defense (DoD) that meets the intent of Congress and provides the best NBC defense for our service members and our nation.

Justification of Funds

- Funding for this program was transferred from individual Service NBC defense procurement programs pursuant to Public Law 103-160, Title XVII.
- NBC Contamination Avoidance - Procurement of equipment to enhance U.S. capability to detect and identify threat agents on the battlefield.
 - FY01: Continues procurement of the Pocket RADIAC system, the Joint Warning and Reporting Network (JWARN), Chemical and Biological (CB) defense equipment to support the Reserve Component unit requirements for domestic preparedness response against weapons of mass destruction (WMD), the Automatic Chemical Agent Alarm (ACADA), Block 1 Modifications of the FOX NBC Reconnaissance System (NBCRS), installation of the Shipboard Automatic Liquid Agent Detector (SALAD) on amphibious, combat and select combat ships, and the Improved Chemical Agent Monitor (ICAM). Initiates procurement of the Joint Service Lightweight NBC Reconnaissance System (LNBCRS) and transfers contamination avoidance system fielding support/spares procurement funding into the respective contamination avoidance CB defense systems funding lines.
- NBC Protection/Decontamination Systems - Procurement of Individual/Collective protection and Decontamination equipment to protect the soldier, sailor, airman or marine allowing the personnel to operate in a contaminated CB environment.
 - FY01: Continues procurement of the Aircrew Eye/Respiratory Protection (AERP) modifications, individual protective gear for naval construction forces and naval shore activities, the M45 Aircrew Protective Masks (to support the hard-to-fit requirement), the M40 series Protective Masks, protective clothing to include the Joint Service Lightweight Integrated Suit Technology (JSLIST) protective ensembles, the CB respiratory system, the Chemical Biological Protective Shelter (CBPS) for Army medical units, the Collectively Protected Deployable Medical System (CP DEPMEDS), the Collective Protection System backfit installation on three Navy amphibious

ship classes (LHA, LHD, and LSD), the Joint Transportable Collective Protection Shelter (JTCOPS), the Joint Collective Protection Equipment (JCPE) improvements to currently fielded systems, decontamination equipment for naval construction forces and overseas shore activities, the Modular Decontamination System (MDS), and the Sorbent Decontamination System (SDS). Transitions system fielding support/spares funding for individual protection, collective protection and decontamination systems into the respective CB defense systems funding lines.

- Biological Detection Systems - Procurement of equipment that provides for (1) detection, identification, warning and sample collection for verification that a biological attack has occurred, and (2) protection of U.S. forces with FDA approved vaccines to protect against biological threats which could be deployed against maneuver units or stationary facilities in the theater of operations.
 - FY01: Continues procurement of the Joint Biological Point Detection System (JBPDS), the Critical Reagents Program (CRP) to ensure the quality and availability of reagents critical to the successful development, test and operation of biological warfare detection systems and medical biological products, the Counterproliferation Long Range Biological Standoff Detection System (CP-LRBSDS), the procurement of equipment for the Air/Base Port (Portal Shield) Advanced Concept Technology Demonstration (ACTD) program for biological detection of high-value CINC fixed sites (airbases, ports), the DoD Biological Vaccine Program, and medical equipment for naval construction forces and overseas shore activities.

**DEFENSE-WIDE
FY 2001 PROCUREMENT PROGRAM**

**APPROPRIATION: 0300D PROCUREMENT, DEFENSE-WIDE
BUDGET ACTIVITY 03: CHEMICAL/BIOLOGICAL DEFENSE**

**EXHIBIT P-1
DATE: FEBRUARY 2000**

LINE NO.	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS							
			FY1999		FY 2000		FY 2001			
			QUANTITY	COST	QUANTITY	COST	QUANTITY	COST		
CBDP										
58	INDIVIDUAL PROTECTION (GP1000)			116.2		124.8				108.7
59	DECONTAMINATION (PA1500)			10.8		13.8				12.2
60	JOINT BIO DEFENSE PROGRAM (MA0800)			45.2		98.8				141.8
61	COLLECTIVE PROTECTION (PA1600)			21.2		36.4				36.2
62	CONTAMINATION AVOIDANCE (GP2000)			101.8		107.4				175.1
	TOTAL CHEMICAL/BIOLOGICAL DEFENSE			295.2		381.2				473.9

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(GP1000) INDIVIDUAL PROTECTION

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	107.1	85.0	116.2	124.8	108.7	93.4	112.4	116.4	140.2	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	107.1	85.0	116.2	124.8	108.7	93.4	112.4	116.4	140.2	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	107.1	85.0	116.2	124.8	108.7	93.4	112.4	116.4	140.2	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Program provides for protective masks, respiratory systems and protective clothing. The M40A1/M42A2 masks, currently in production, are replacements for the aging masks in the field. The new masks accommodate a greater portion of the current Service population, thus reducing or eliminating the need for specially-fitted masks. Other significant improvements have been made in field of view, communication, drinking capability and compatibility with other equipment. The Protective Assessment Test System (PATS) is used to assess the fit of a mask to the individual. Interim service unique procurements required for protection to Aircrews include: the Army's Aircrew Protective Mask (ACPM), which provides protection against chemical and biological (CB) agents and is more compatible with emerging optical and weapon sighting equipment; the Navy's CB Respiratory System, which fills an existing need for protection of Naval and Marine aircrews against CB agents. In the area of protective clothing, the emphasis is on the Joint Service Lightweight Integrated Suit Technology (JSLIST) program, a Four-Service effort to procure and field a common chemical protective ensemble will replace all existing chemical biological suits in the Services current inventory.

JUSTIFICATION: Operational forces across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions have an immediate need to survive and sustain operations in a CB threat environment. Individual protection is provided by means of masks, protective clothing, aircrew respiratory systems and firefighters' and explosive ordnance disposal ensembles. The Joint NBC Defense program includes individual protection equipment that both improves current protection levels and reduces the physiological and logistical burden on the individual soldier, sailor, airman or marine. The goal is to procure equipment which will allow for the individual to operate in a contaminated CB environment with minimal degradation in his/her performance.

Exhibit P-40M, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(GP1000) INDIVIDUAL PROTECTION

Program Elements for Code B Items:

Code:
A

Other Related Program Elements:
A

Description

Fiscal Years

OSIP NO.	Classification	PRIOR	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
Aircrew Eye/Resp.Protection	Maintainability										
NA	Mission Capability	1.4	4.1	1.9	0.9	1.3	0.9	0.0	0.0	0.0	10.5
Totals		1.4	4.1	1.9	0.9	1.3	0.9	0.0	0.0	0.0	10.5

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (GP1000) INDIVIDUAL PROTECTION			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
AERP Aircraft Mods		A				4059			1880			887		
Navy Individual Protective Gear		A				575			3388			5456		
IP System Fielding Support/Spares		A				680			644					
Protection Assessment Test System M41		A				5300			5285					
Mask, Acft M45		A				2179						373		
M40 Protective Mask		A				15819			11194			1506		
Protective Clothing		A				80345			95055			96475		
CB Respiratory System -Aircrew		A				7286			7338			4028		
TOTAL						116243			124784			108725		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JN0011) AERP AIRCRAFT MODS

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	2.6	0	1.4	4.1	1.9	0.9	1.3	0.9	0	0	0	13.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2.6	0	1.4	4.1	1.9	0.9	1.3	0.9	0	0	0	13.0
Initial Spares												
Total Proc Cost	2.6	0	1.4	4.1	1.9	0.9	1.3	0.9	0	0	0	13.0
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Aircrew Eye/Respiratory Protection (AERP) is a second generation chemical/biological oxygen mask designed to replace the current MBU-13 mask. The new mask will provide improved chemical/biological agent protection to all Air Force air crews in all chemical/biological theaters. The AERP is designed to improve visibility, fit, protection, and comfort.

The AERP System is a combination of the individual protective equipment, which is worn by aircrew members. These aircrew members connect the AERP to aircraft interfaces - oxygen, communications and electrical - for chemical/biological protection. This program modifies the aircraft's oxygen, communications and electrical connections, to accept the AERP system.

JUSTIFICATION: PMD 4026 (14) 3. USAF SON 004-85, Sustained Operations in a Chemical/Biological Environment, 19 Sep 86. Aircrew Eye/Respiratory Protection (AERP) is required for an aircrew member to operate in a chemical/biological warfare environment. FY01 continues the AERP Mod program.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JN0011) AERP AIRCRAFT MODS

Program Elements for Code B Items:

0604384BP, Project IP5

Code:

B

Other Related Program Elements:

RD&E Code B Item

The aircraft must be modified so as to allow each aircrew member the ability to use the Aircrew Eye Respiratory Protection system. This involves creating and installing separate modification kits that will allow the AERP system to integrate with the electrical, oxygen, and communication systems of the different aircraft types..

FY98: \$1.4M FY99 \$0.3 M; FY00 \$0.8 M; FY01 \$0.1 M; FY02 \$0.1 M; FY03 \$0.1; FY04 \$0.1M.

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: Aircrew Eye/Respiratory Protection

MODELS OF SYSTEM AFFECTED: Multi-Aircraft

DESCRIPTION/JUSTIFICATION:

Aircrew Eye/Respiratory Protection (AERP) is required for an aircrew member to operate in a chemical/biological warfare environment. The AERP System is a combination of the individual protective equipment, which is worn by aircrew members, and aircraft interfaces - oxygen, communications and electrical - to which the aircrew member connects the AERP for chemical/biological protection. This program modifies the aircraft's oxygen, communications and electrical connections to accept the AERP system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The AERP system is already fielded in the majority of Air Force aircraft. Procurement of individual protection equipment and design/installation of aircraft modifications is on-going. Design on-going for B-2. Installations ongoing on RC-135, AC-130, B-1B and E-3.

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs				73				46				17				1				2
Outputs				73				46				17				1				2

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs				21																160
Outputs				21																160

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 17 Months

Contract Dates: FY 1999 3/99

FY 2000 3/00

FY 2001 3/01

Delivery Date: FY 1999 7/00

FY 2000 7/01

FY 2001 7/02

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): Aircrew Eye/Respiratory Protection

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
	RDT&E		1.6		0.8		0.1		0.1		0.1		0.1									2.8
PROCUREMENT																						
Kit Quantity	73	1.4	46	4.1	17	1.9	1	0.9	2	1.3	21	0.9									160	10.5
Installation Kits																						
Installation Kits, Nonrecurring																						
Equipment																						
Equipment, Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other		12.8																				12.8
Interim Contractor Support																						
Installation of Hardware																						
FY 1998 & Prior Eqpt -- Kits	73																					73
FY 1999 Eqpt -- Kits			46																			46
FY 2000 Eqpt -- Kits					17																	17
FY 2001 Eqpt -- Kits							1															1
FY 2002 Eqpt -- Kits								2														2
FY 2003 Eqpt -- Kits											21											21
FY 2004 Eqpt -- Kits																						
FY 2005 Eqpt -- Kits																						
TC Equip-Kits																						
Total Equip-Kits	73		46		17		1		2		21											160
Total Procurement Cost		14.2		4.1		1.9		0.9		1.3		0.9										23.3

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JN0013) NAVY INDIVIDUAL PROTECTIVE GEAR

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0.2	0.6	3.4	5.5	2.3	3.2	0	0	0	15.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0.2	0.6	3.4	5.5	2.3	3.2	0	0	0	15.2
Initial Spares												
Total Proc Cost	0	0	0.2	0.6	3.4	5.5	2.3	3.2	0	0	0	15.2
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This program continues the initial outfitting of Naval Construction Forces and Naval Shore Activities with protective equipment to counter the effects of chemical/biological (CB) warfare during deployments to high threat theaters. From 1992 to 1997 the Navy Operation & Maintenance (O&M) budget included the funds to procure these initial outfitting items for Naval Facilities Engineering Command (NAVFAC) activities. In 1996, an Integrated Product Team refined the definition of what items should be centrally procured and funded through the CB Defense (CBD) program. The NAVFAC initial outfitting requirements met this definition and the FY98 through FY03 funds were transferred from the Navy budget into the Joint CBD budget. The Joint Services Material Group has reviewed and confirmed this requirement each year since the transition. Funding in this line has been transferred to other CBD budget lines where other programs procure equipment that meets the NAVFAC initial outfitting requirements. Beyond FY03, NAVFAC requirements will be fully integrated into the Joint CBD programs and this stand-alone program will not be required. Items to be procured in FY01 include protective clothing, detectors, decontamination equipment and medical supplies for the Naval Support Element, Naval Construction Force, Maritime Pre-positioned Forces and Naval Overseas Shore Activities. This program is in accordance with DoD Financial Management Regulation Volume 2A, Chapter 1, Section 010201, (Criteria for Determining Expense and Investment Costs).

JUSTIFICATION: Consistent with changing global defense priorities and strategies, Operational Navy Instruction 3400.10F requires that U.S. Navy units maintain the ability to sustain operations in areas threatened or contaminated with Chemical/Biological/Radiological (CBR) materials. Without adequate equipment, personnel will not be able to maintain the capability to survive a tactical CB attack or execute approved Operational Plans. FY01 procures 2600 M295 Decon kits, 1858 DT-60 Dosimeters, 80 Portable Collective Protective Shelters, and Individual Protective Equipment for TA-55 Maritime Pre-positioned Forces, Naval Mobile Construction Battalions, and Naval Base Command Seattle.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JN0013) NAVY INDIVIDUAL PROTECTIVE GEAR			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Individual Protective Equipment (coveralls, boots, footwear covers, gloves, glove inserts, canteen and canteen cover)						198			414			1509		
2. Collective Protection (Portable Collective Protective Shelter)												877		
3. Detection (M9 Paper, M8 Paper, DT-60 Dosimeter)						5						234		
4. Decontamination (M291 Decon, M295 Decontamination Kit, M17 Lightweight Decon System)						49			2565			1907		
5. Medical (Atropine inj, Pralidox inj, Diazepam inj, Pyridostigmine)						49			172			714		
6. System Fielding Support						274			237			215		
TOTAL						575			3388			5456		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(M95801) PROTECTION ASSESSMENT TEST SYSTEM (PATS) M41

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1097	1351	912	896	908	0	0	0	0	0	0	5164
Gross Cost	6.4	7.6	5.2	5.3	5.3	0	0	0	0	0	0	29.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	6.4	7.6	5.2	5.3	5.3	0	0	0	0	0	0	29.8
Initial Spares												
Total Proc Cost	6.4	7.6	5.2	5.3	5.3	0	0	0	0	0	0	29.8
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M41 Protection Assessment Test System (PATS) is a non-developmental item, which consists of a small portable instrument, designed to provide the soldier with a simple and accurate means of validating the face-piece fit of their protective mask. This includes insuring that soldiers are wearing properly sized and operational masks. The PATS, approximately 200 cubic inches in size and 4 pounds in weight, is based on a miniature condensation nucleus counter (CNC). The CNC operates by continuously sampling and counting individual particles that occur naturally in the surrounding air. The PATS measures the concentration of these particles both inside and outside the mask and from these values calculates a fit factor (FF). The FF is a measure of the quality of the face-seal.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M95801) PROTECTION ASSESSMENT TEST SYSTEM (PATS) M41			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. PATS		A				4883	896	5.449	5039	908	5.549			
2. Battery (BA-5847/U)						116			118					
3. Isopropyl Alcohol (99.5% grade)						301			128					
4. Engineering Support (Gov't) (In-house)														
TOTAL						5300			5285					

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M95801) PROTECTION ASSESSMENT TEST SYSTEM (PATS) M41						
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
PATS FY 99	TSI Inc., St. Paul, MN	Option **	ACALA	Jan-99	Apr-99	896	5449	Yes			
FY 00	TSI Inc., St. Paul, MN	Option**	ACALA	Jan-00	Apr-00	908	5549	Yes			

REMARKS: **Option to FY98 Contract

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(M99501) MASK, AIRCRAFT M45

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	13043	9768	3500	0	125	125	0	0	0	0	26561
Gross Cost	0	7.4	6.2	2.2	0	0.4	0.2	0	0	0	0	16.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	7.4	6.2	2.2	0	0.4	0.2	0	0	0	0	16.3
Initial Spares												
Total Proc Cost	0	7.4	6.2	2.2	0	0.4	0.2	0	0	0	0	16.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M45 Aircrew Protective Mask (ACPM) replaces the currently fielded M49 Aircraft Mask and the M24 masks for all Army aviation applications, except the AH-64 (Apache). The ACPM consists of a facepiece, hose assembly, second skin (removable overcover), filter canister, laser and ballistic eye lens covers, vision corrective eye lens, and carrier. The M45 addresses identified limitations of previous Aircraft Masks such as a high unit cost and requirements for a separate air motor/blower system. Improvements over previous Aircraft Masks include protection and defogging of lenses without the use of an air motor/blower, reduced weight and bulk, reduced logistics and support costs, and improved sizing and fitting. The ACPM will be the principal CB protective equipment for both pilots and aircrew. The M45 is also used to provide hard-to-fit soldiers, sailors, marines and airmen who cannot be fit with standard issue masks.

JUSTIFICATION: The FY01 procurement supports the hard-to-fit requirement and continues the fielding of the M45 Aircrew and M48 Apache masks. The M45 mask provides the aviation community with a CB protective mask which provides easy compatibility with existing and emerging aviation weapon sighting and optical equipment. The M45 mask eliminates the use of a separate, battery operated motor and blower and is fully compatible with helicopter systems. The M45 mask radically improves safety of flight and provides compatibility with night vision goggles and weapon sighting systems, thereby increasing the comfort of the aircrew. (ORD, CARDS #1273, Approved 13 Sep 93)

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M99501) MASK, AIRCRAFT M45			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware Mask M45		A				1383	3500	0.395				75	125	0.600
Canister						32								
Carriers						42								
2. Engineering Changes						50								
3. Leak Test - 100% of Production														
a. Government						127								
b. Contractor						69								
4. Quality Control (Gov't)						215								
5. Engineering Support (Gov't)						261								
6. System Fielding (Total Package Fielding, First Destination Transportation & New Equipment Training)												298		
TOTAL						2179						373		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M99501) MASK, AIRCRAFT M45					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Mask M45 FY 99	Campbell Plastics, Corona, CA	SS/FPM-3(3)	SBCCOM IMMC(RI)	Nov-98	Feb-00	3500	400	Yes		
FY 01	Campbell Plastics, Corona, CA	SS/FPM	SBCCOM IMMC(RI)	May-01	Sep-01	125	600	Yes		

REMARKS: This program was procured through an 8(a) set-aside.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(M99601) MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD:M40/M40A1

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	122993	47205	38095	104554	80535	0	0	0	0	0	0	393382
Gross Cost	17.9	6.0	6.4	15.8	11.2	1.5	0.1	0	0	0	0	59.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	17.9	6.0	6.4	15.8	11.2	1.5	0.1	0	0	0	0	59.0
Initial Spares												
Total Proc Cost	17.9	6.0	6.4	15.8	11.2	1.5	0.1	0	0	0	0	59.0
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The M40A1 mask is issued to the individual soldier. This mask is designed to protect the face, eyes and respiratory tract against field concentration of chemical and biological agents. The M40A1 mask consists of a form-fitting facepiece with rigid binocular lenses attached to the facepiece. The canister is the air-filtering medium for the mask and is mounted on the facepiece either on the left or right side, as desired by the wearer. A front voicemitter is used for face-to-face communication and a side voicemitter used for communications with telephone and radio handsets. The M40A1 mask replaces the M17 and M9A1 series masks. A Pre-planned Product Improvement was incorporated in FY93 to upgrade the M40 mask to the M40A1 configuration. The M40A1 mask incorporates a quick-doff hood that allows doffing the hood without removing the mask. The M40 and M40A1 masks were designed to be compatible with and use NATO canisters. Remanufacture efforts conducted in a Government facility are upgrading all unissued M42 and M42A1 masks to the M42A2 configuration, at a significant cost savings. Program also supports initial issue of the Universal Second Skin (USS) for the Army and USMC. The USS provides optimum liquid agent protection for the mask.

JUSTIFICATION: FY01 funds procure Universal Second Skins (USSs) which are an integral part of the M40/M42 Series Masks, providing liquid agent protection. USS support the "Go-To-War" Chemical Defense Equipment (CDE) program. These items are also being procured for the USMC. The masks procured with FY00 and prior year funding will allow continued replacement of the aging masks currently in the field. The M40A1 mask provides a very significant improvement over the aging M17 and M9 series currently deployed. The new design accommodates a greater portion of the current soldier population, thus reducing or eliminating the need for specially-fitted masks. Significant improvements in field of view, ability to communicate, drinking capability and compatibility with other Army equipment are features of the new design. The externally mounted NATO interchangeable canister reduces time required to change filtration systems and allows the use of other countries' canisters, improving battlefield availability. The expedited replacement of aging masks is a necessity to maintain and improve the required state of combat readiness.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M99601) MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD:M40/M40A1			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. M40A1 Protective Field Mask Hardware (ILC Dover)		A				9116	104554	0.087	7020	80535	0.087			
Canister (includes 2 extra canisters per mask for Navy in FY98 and FY99)						1117			726					
Engineering Support						692			367					
Cost Bearing ECPs						300			581					
2. Universal Second Skin (USMC)		A				2918								
3. M42A2 Upgrade (Pine Bluff Arsenal)						440								
4. Universal Second Skin (Army)						1236			1500			1365		
5. System Fielding (Total Package Fielding, First Destination Transportation & New Equipment Training)												141		
6. M42 Reclamation (Pine Bluff Arsenal)									1000					
TOTAL						15819			11194			1506		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (M99601) MASK, CHEM-BIOLOGICAL PROTECTIVE FIELD:M40/M40A1
---	---------------------	--

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
M40A1 Protective Field Mask FY 99 FY 00	ILC Dover, DE ILC Dover, DE	C/FFP-4(4) Option	SBCCOM IMMC(RI) SBCCOM IMMC(RI)	Mar-99 Jan-00	Jan-00 Sep-00	104554 80535	87 87	Yes Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(MA0400) PROTECTIVE CLOTHING

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	286814	217626	337439	359166	330871	351340	341323	335800	338607	Continuing	Continuing
Gross Cost	0.0	58.8	57.9	80.3	95.1	96.5	89.5	86.8	87.3	88.0	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	58.8	57.9	80.3	95.1	96.5	89.5	86.8	87.3	88.0	Continuing	Continuing
Initial Spares												
Total Proc Cost	0.0	58.8	57.9	80.3	95.1	96.5	89.5	86.8	87.3	88.0	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Joint Service Protective Clothing program provides production of the following protective clothing ensembles:

- (1) The Joint Service Lightweight Integrated Suit Technology (JSLIST) program, currently in production, to field a common chemical protective ensemble (suits, boots, and gloves) to US Forces. The program provides adequate chemical protection, reduced heat stress, full compatibility with all interfacing equipment, longer wear (45 days) and launderability, a single technical data package and technical data manual, a standard tariff, split issue to improve fit and reduce inventory, and flame retardancy. JSLIST promotes commonality and standardization to maximize resources and eliminate redundancy among the Services. Procurement will also include the Fire Fighters' Ensemble components, Proximity Glove Liners and Modification Kits, for use with JSLIST.
- (2) The Fire Fighting Ensemble (FFE) system provides modification to the JSLIST suit -- necessary for wear with the fire fighter proximity suit and fire fighter Chemical/Biological mask (NSN 4240-02-35905641).
- (3) Interim aviator protective suits will be procured during FY01 for the Joint Services' to maintain a near-term Chemical/Biological protection capability for aviators and aircrew members until production of the Joint Protective Aircrew Ensemble (JPACE) in FY03.

JUSTIFICATION: Protective Clothing is a Joint Service chemical protective ensemble development, testing and production program based on a 24 November 1993 Memorandum of Agreement (MOA) among the Services. The MOA defines the responsibilities and working relationships among the participants for program management, development, and logistics support. As the designated lead service, the Marine Corps will provide milestone decision approval following service approval of materials, designs, and final garments. Protective Clothing Program (PCP) integrates technological improvements in protective military garments. These improvements provide Service members chemical/biological protection in all combat theaters. The PCPs provide more flexibility, comfort, durability and maintainability. In addition, the program provides commonality, standardization and full compatibility of all interfacing equipment. FY01 is continuing procurement of JSLIST Ensemble, which includes 330,871 overgarments and 279,813 boots. and 253,200 gloves.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(MA0400) PROTECTIVE CLOTHING

Program Elements for Code B Items:

PE 064384BP, Project IP5

Code:

B

Other Related Program Elements:

B

RDT&E Code B Item

Joint Service Lightweight Integrated Suite Technology (JSLIST) P3I - This program employs a pre-planned product improvement strategy as an extension of JSLIST Program. Specifically, the JSLIST P3I will invite contractors to submit tested protective materials for evaluation in the quest for the next generation of advanced chemical protective clothing.

JSLIST Glove: Conduct development and operational assessment of candidate chemical protective materials to satisfy the Services and SOCOM urgent requirement for an improved chemical protective glove.

JSLIST P3I and GLOVE

FY98 and earlier \$9.5M; FY99 \$6.1M; FY00 \$2.8M

3QFY00 - Glove OT

2QFY00 - Glove MS IIIA

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (MA0400) PROTECTIVE CLOTHING			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
JSLIST														
1. Overgarment		A				67488	337439	0.200	71833	359166	0.199	66174	330871	0.199
2. Boots		A				9000	257143	0.034	12570	359166	0.034	9792	279813	0.034
3. NET/TAD/FDT/DPSC Support Cost						2340			1144			1422		
4. Engineering Support (Gov't)						418			1249			589		
5. Quality Control (Gov't)						175			713			600		
6. Contract Support						266			513			568		
Firefighter's Ensemble														
1. Firefighter Modification Kit		A				658	3133	0.210						
2. Engineering Support (Contract)														
JSLIST - Gloves		B							7033	281320	0.025	6330	253200	0.025
Interim Aviator Protective Suit												10500	30000	0.350
Production Support Cost (Govt)												500		
TOTAL						80345			95055			96475		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (MA0400) PROTECTIVE CLOTHING
---	---------------------	---

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Firefighter Modification Kits FY 99	Interspiro, Brandford, CT	C/FFP	Air Force Material Command	Mar-99	May-99	3133	210	Yes		
Interim Aviator Protective Suit FY 01	TBS	C/FFP	MARCORSYCOM	Jan-01	Apr-01	30000	350	Yes		
JSLIST-Boots FY 99	Tingley Rubber Inc., South Plains Field, NJ	C/FFP	MARCORSYSCOM	Jun-99	Sep-99	253646	35	Yes		Feb-99
FY 00	TBS	C/FFP	Def Supply Ctr - Phila.	Apr-00	Sep-00	179583	35	Yes		Feb-00
	TBS	C/FFP	Def Supply Ctr - Phila.	Apr-00	Sep-00	179583	35	Yes		Feb-00
FY 01	TBS	Option	Def Supply Ctr - Phila.	Apr-01	Sep-01	139906	35	Yes		
	TBS	Option	Def Supply Ctr - Phila.	Apr-01	Sep-01	139907	35	Yes		
JSLIST-Gloves FY 00	TBS	C/FFP	MARCORSYSCOM	Apr-00	Sep-00	281320	25	No		Feb-00
FY 01	TBS	Option	MARCORSYSCOM	Feb-01	May-01	253200	25	No		
JSLIST-Overgarment FY 99	NISH, (TX/IN/ME) Creative Apparel, Belfast, ME	C/FFP	Def Supply Ctr - Phila.	Apr-99	Sep-99	110959	200	Yes		
		Option	Def Supply Ctr - Phila.	Mar-99	May-99	226480	200	Yes		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (MA0400) PROTECTIVE CLOTHING
---	---------------------	---

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 00	Creative Apparel, Belfast, ME NISH, (TX/IN/ME) TBS	Option	Def Supply Ctr - Phila.	Mar-00	Sep-00	143166	200	Yes		
		C/FFP	Def Supply Ctr - Phila.	Apr-00	Sep-00	110495	200	Yes		
		Option	Def Supply Ctr - Phila.	Mar-00	Sep-00	105505	200	Yes		Jan-00
FY 01	Creative Apparel NISH, (TX/IN/ME) TBS	Option	Def Supply Ctr - Phila.	Mar-01	Sep-01	114871	200	Yes		
		C/FFP	Def Supply Ctr - Phila.	Apr-01	Sep-01	121040	200	Yes		
		Option	Def Supply Ctr - Phila.	Mar-01	Sep-01	94960	200	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(N00020) CB RESPIRATORY SYSTEM - AIRCREW

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	1188	1206	1180	1234	692	0	0	0	0	0	5500
Gross Cost	0	7.2	7.3	7.3	7.3	4.0	0	0	0	0	0	33.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	7.2	7.3	7.3	7.3	4.0	0	0	0	0	0	33.2
Initial Spares												
Total Proc Cost	0	7.2	7.3	7.3	7.3	4.0	0	0	0	0	0	33.2
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Chemical Biological (CB) Respiratory System is an aircrew CB respiratory system for use by the aircrews of Navy and Marine Corps tactical, rotary-wing, and land-based fixed-wing aircraft.

JUSTIFICATION: Navy and Marine Corps tactical and Navy rotary-wing aircrews currently have no respiratory protection against CB warfare agents. This program procures Non-Developmental Items respiratory systems to correct this deficiency. FY01 procures 692 systems for Navy and Marines.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (N00020) CB RESPIRATORY SYSTEM - AIRCREW			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
C/B Respiratory System Hardware		A				5659	1180	4.795	5923	1234	4.799	3321	692	4.799
Engineering Support						327			300			104		
In-house Support (NAWCAD)						1300			1115			603		
TOTAL						7286			7338			4028		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (N00020) CB RESPIRATORY SYSTEM - AIRCREW					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CB Respiratory System Hardware										
FY 99	Camlock LTD, UK	FFP/Option	NAVAIR, Patuxent, MD	Apr-99	Jul-99	1180	4800	Yes		
FY 00	Camlock LTD, UK	FFP/Option	NAVAIR, Patuxent, MD	Mar-00	Jun-00	1234	4800	Yes		
FY 01	Camlock LTD, UK	FFP/Option	NAVAIR, Patuxent, MD	Feb-01	May-01	692	4800	Yes		

REMARKS: Options are to the FY97 competitive firm fixed price contract, N0001997C0034, awarded in March 1997.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(PA1500) DECONTAMINATION

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	4.2	0.3	2.6	10.8	13.8	12.2	16.1	16.3	10.7	11.4	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.2	0.3	2.6	10.8	13.8	12.2	16.1	16.3	10.7	11.4	Continuing	Continuing
Initial Spares												
Total Proc Cost	4.2	0.3	2.6	10.8	13.8	12.2	16.1	16.3	10.7	11.4	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The decontamination programs will provide equipment to facilitate the removal and detoxification of contaminants from materiel without inflicting injury to personnel or damage to equipment or environment. This Joint Service program facilitates the procurement of a more transportable, less labor intensive and more effective system for applying decontaminating solutions and removing gross contamination from vehicle and equipment surfaces. Contamination control techniques have been developed which minimize the extent of contamination pickup and transfer and maximize the ability of units to remove contamination both on-the-move and during dedicated decontamination operations. The Modular Decontamination System, Lightweight Decontamination System, and Sorbent Decontamination System will provide this capability. Lessons learned from Desert Storm validated the need for a deployable and efficient decontamination system.

JUSTIFICATION: Operational forces, facilities and equipment must be decontaminated to safely operate, survive and sustain operations in a nuclear, biological and chemical agent threat environment. Key factors are reduced weight, increased transportability, decreased labor intensity, reduced water usage and a more effective system for applying decontaminating solutions to vehicle and equipment surfaces. Decontamination of facilities frequently requires a large area to be covered, but weight, water usage and labor intensity factors may not be as important as mobility and the ability to decontaminate large areas rapidly.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (PA1500) DECONTAMINATION			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Modular Decon System		A				5950			7562			9430		
M17 Lightweight Decon System		A				4815			4638					
Sorbent Decontamination System		B							1493			2765		
DE System Fielding Support/Spares		A				63			126					
TOTAL						10828			13819			12195		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(G47001) MODULAR DECON SYSTEM

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	0	0	64	74	130	135	134	0	0	0	537
Gross Cost	0	0	0	6.0	7.6	9.4	9.8	9.5	0.1	0	0	42.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	6.0	7.6	9.4	9.8	9.5	0.1	0	0	42.3
Initial Spares												
Total Proc Cost	0	0	0	6.0	7.6	9.4	9.8	9.5	0.1	0	0	42.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: A Modular Decon System (MDS) includes one M21 Decontaminant Pumper (DP) module and two M22 High Pressure Washer (HPW) modules. The M21 DP is capable of delivering DS2 or liquid field expedient decontaminants, i.e., formalin, household bleach, or diesel fuel. The M21 DP may be operated from the ground or trailer, and when trailer mounted it is capable of drawing the decontaminant directly from a container on the ground. Its accessories include hoses and hose reels, two trigger controlled spray wands, and two electrical powered scrub brush assemblies. The M22 HPW will provide ambient or heated water at pressures up to 3,000 pounds/square inch (psi) at a rate of 5 gallons per minute (gpm) with the capability of injecting liquid detergents and providing a high volume (40 gpm) flow of cold water. Its accessories include hoses and hose reels, trigger controlled spray wands, a shower bar, nozzles and hydrant adapters. The M22 HPW will be capable of drawing water from natural water sources and delivering it at variable adjustable pressures, temperatures and flow rates. The hydrant adapters will provide connections for using urban water supplies. Associated Support Items of Equipment (ASIOE) are free issue for the Army, and include: 3,000 gallon flexible water tank - 2 each system; a 125 gpm diesel pump - 1 each system; special purpose webbing - 16 each system and a high mobility trailer for each module - 3 each system.

JUSTIFICATION: There are no current systems which provide powered pumping and scrubbing capability for application of decontamination agent DS2, with the capability to also apply field expedient decontaminants such as formalin, bleach and diesel fuel. The M21 DP provides first time capability in this area. The M22 HPW will provide, for the first time, a high pressure hot water capability to chemical companies and may also be used by naval port/air facility decon units. The MDS will be fielded to the dual purpose smoke/chemical companies for the purpose of conducting detailed equipment decontamination, replacing both the M12A1 Skid Mounted Decon Apparatus and, for hasty decontamination, the M17 Lightweight Decontamination System (LDS). Displaced M17 LDS will be cascaded to other non-chemical units to fill unit requirements. Chemical companies can use the MDS to fulfill the decontamination requirements of the initial wash, decontaminant application, and rinse steps of detailed equipment decontamination as described in NBC Decontamination field manuals. Non-chemical units may be provided the M22 HPW and its components to be used in hasty decontamination operations. The MDS will be supported by the standard logistics system, maintenance system and standard tools. FY01 produces 130 M21's and 260 M22's.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (G47001) MODULAR DECON SYSTEM			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. MDS Hardware		A												
M21 Decontaminant Pumper - 1 ea						1190	64	18.594	1384	74	18.703	2431	130	18.701
M21 Powered Brush - 1 ea						749	64	11.704	858	74	11.595	1508	130	11.601
M21 Spare Parts									60					
M22 High Pressure Washer - 2 each						2253	128	17.602	2250	148	15.203	4082	260	15.701
M22 Spare Parts						83								
2. Engineering Support														
Contractor						270			270			200		
Government						699			729			660		
3. QA Support						375			269			169		
4. ILS														
Contractor									197			100		
Government						125			125			130		
5. Training (NET)														
Contractor									514			150		
Government														
6. Technical Data/Documentation						156			50					
7. Follow-on Operational Test						50			856					
8. ASIOE (GFE to Army)														
TOTAL						5950			7562			9430		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:		P-1 Line Item Nomenclature: (G47001) MODULAR DECON SYSTEM						
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
M21 Decontaminant - 1 per system FY 99	The Centech Gp Inc., Alexandria, VA	SS	SBCCOM	Sep-99	Apr-00	64	30298	Yes	Jul-99	
M21 Decontaminant* - 1 per system FY 00	The Centech Gp Inc., Alexandria, VA	FFP/Option1	SBCCOM	Mar-00	Nov-00	74	30298	Yes	Jul-99	
FY 01	The Centech Gp Inc., Alexandria, VA	FFP/Option2	SBCCOM	Nov-00	Apr-01	130	30302	Yes	Jul-99	
M22 High Pressure Washer - 2 per system FY 99	The Centech Gp Inc., Alexandria, VA	FFP/Option1	SBCCOM	Aug-99	Apr-00	128	17602	Yes	Aug-99	
FY 00	The Centech Gp Inc., Alexandria, VA	FFP/Option2	SBCCOM	Mar-00	Nov-00	148	15203	Yes	Aug-99	
FY 01	The Centech Gp Inc., Alexandria, VA	FFP/Option3	SBCCOM	Nov-00	Apr-01	260	15701	Yes	Aug-99	
Note: the M21 includes the Powered Brush.										

REMARKS: M21 FY99 contract is an 8A set-a-side contract.
M22 FY99 contract is an option to a development contract.
FY00 MDS received a congressional add of \$1.5M resulting in the procurement of 14 additional systems.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JN0018) SORBENT DECON

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	0	0	0	17000	40000	80000	80000	0	0	0	217000
Gross Cost	0	0	0	0	1.5	2.8	4.8	4.8	0	0	0	13.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	1.5	2.8	4.8	4.8	0	0	0	13.8
Initial Spares												
Total Proc Cost	0	0	0	0	1.5	2.8	4.8	4.8	0	0	0	13.8
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The XM24 Sorbent Decontamination System (SDS) meets the needs of immediate decontamination. The system is comprised of two packets filled with sorbent powder and two mitt applicators. The XM24 SDS is packaged in a hardened case and mounted via two straps to a bracket. The sorbent powder is Aluminum Oxide doped with Silica, which is then physically blended with carbon for color. The mitt is a commercial car wash type mitt. The mitt is donned and the sorbent powder is liberally applied to the palm of the mitt during the decontamination wiping process. The system is completely disposable and requires no spare or repair parts. The ease of use enhances the readiness of the warfighter. The XM24 replaces both the M11 and M13 Decontamination Apparatuses and their associated decontaminating solution #2 (DS2) configurations (1 1/3qt and 14 liter).

JUSTIFICATION: FY01 program continues acquisition of systems to support initial issue to service users. The XM24 will replace every M11 and M13 as well as 1 1/3qt and 14L DS2 configuration in the Joint Service inventory. The supply quality and environmental hazard of DS2 has made usage, storage and liability very costly.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JN0018) SORBENT DECON

Program Elements for Code B Items:

0603884BP, Project DE4/0604384BP, Project DE5

Code:

B

Other Related Program Elements:

RDTE Code B Item

The Sorbent program provides a reactive Sorbent for immediate decontamination for equipment wipedown. Future RDTE work addresses skin decontamination compatibility and will support FDA approval for use of the Sorbent Decontamination compound for skin decontamination.

Personal Equipment Wipedown and Operator Spraydown: FY98 and Prior - \$3.0 M; FY99 - \$4.3 M; FY00 - \$5.4 M

Skin Decontamination: FY01 - \$1.5 M; FY02 - \$3.8 M; FY03 - \$8.2 M; FY04 - \$4.8 M; FY05 - \$1.0 M

Personal Equipment Wipedown and Operator Spraydown

EDT/IOT 1QFY00

MS III 2QFY00

FUE/IOC 2QFY01

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JN0018) SORBENT DECON			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware														
XM24 Sorbent Decon System		B						850	17000	0.050	2000	40000	0.050	
Brackets								68	17000	0.004	160	40000	0.004	
System Support														
Engineering Support								485			605			
New Equipment Training (NET)								90	30000	0.003				
TOTAL								1493			2765			

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JN0018) SORBENT DECON					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
XM24 Sorbent Decontamination System										
FY 00	TBS	SS	SBCCOM	Mar-00	Jun-00	17000	50	Yes		Feb-00
FY 01	TBS	C/FP	SBCCOM	Dec-00	Apr-01	40000	50	Yes		Jul-00

REMARKS: FY00 procurement funding was a Congressional add.

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(MA0800) JOINT BIO DEFENSE PROGRAM

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	22.0	32.8	63.1	45.2	98.8	141.8	119.7	139.2	156.3	148.1	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.0	32.8	63.1	45.2	98.8	141.8	119.7	139.2	156.3	148.1	Continuing	Continuing
Initial Spares												
Total Proc Cost	22.0	32.8	63.1	45.2	98.8	141.8	119.7	139.2	156.3	148.1	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The detection component of the Joint Biological Defense Program consists of the following: (1) land-based Biological Integrated Detection System (BIDS); (2) airborne Long Range Biological Stand-off Detection System (LR-BSDS); (3) sea-based Interim Biological Agent Detector (IBAD); (4) land-based Joint Biological Point Detection System (JBPDS); (5) Critical Reagent Program (CRP); and (6) Air/Base Port Biological Detection (Portal Shield) System. BIDS is a vehicular platform, point detection system which will detect the presence of biological agents and identify the specific agent type. LR-BSDS is an airborne platform which will detect man-made aerosol clouds to ranges in excess of 50km. IBAD is a shipboard-mounted point detection system consisting of a sampler, particle counter and Hand Held Assays. JBPDS is a detection suite consisting of complementary trigger, sampler, detector and identification technologies to detect and identify the full range of biological agents in real-time. CRP integrates and consolidates all Department of Defense (DoD) reagents/antibodies/DNA biological detection requirements. Air/Base Port Biological Detection (Portal Shield) is comprised of a suite of detection sensors that are networked via land line or radio frequency communications to a computer which resides within the installation Command Post/Emergency Operations Center. The vaccine acquisition components of the Joint Biological Defense Program is focused on a prime (systems) contract approach in which the prime contractor will manage biological defense medical products. The currently licensed Anthrax vaccine will provide 2.4M Troop Equivalent Doses (TED) against the two highest biological warfare (BW) threat agents and 0.3M TED against other BW agents.

JUSTIFICATION: Operation Desert Storm (ODS) identified the inability of United States (U.S.) forces to effectively detect and identify BW agents. Current national military strategy specifies a worldwide force projection capability that requires BW detection in order to protect the force against potential threats. Operational forces, contingency, special operations/low intensity conflict, counternarcotics and other high risk missions, have the immediate need to survive and sustain operations in a biological agent threat environment. Operating forces have a critical need for defense from worldwide proliferation of BW capabilities and medical treatment of BW related casualties. The Joint Biological Defense Program will provide a tiered strategy for detection and warning comprised of complementary detection/identification systems to provide theater protection against a large area and point attacks. The other biological defense mission requirement is to provide U.S. forces with enhanced survivability and force protection through the introduction of Food and Drug Administration approved vaccines to protect against current emerging threats which could be deployed against maneuver units or stationary facilities in the theater of operations.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (MA0800) JOINT BIO DEFENSE PROGRAM			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Joint Bio Point Detection System									22614			53596		
Critical Reagent Program					1735				2412			1911		
Long Range Bio Standoff Det Sys									1907			11733		
Portal Shield Equipment					14564				3877			24746		
DoD Biological Vaccine Program					14818				48634			49795		
Bio Integrated Detector System (BIDS)					14082				19322					
TOTAL					45199				98766			141781		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	0	0	0	25	143	163	250	151	111	Continuing	Continuing
Gross Cost	0	0	0	0	22.6	53.6	61.7	91.5	59.4	46.2	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	22.6	53.6	61.7	91.5	59.4	46.2	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	22.6	53.6	61.7	91.5	59.4	46.2	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Joint Biological Point Detection System (JBPDS) provides continuous, rapid and fully automated collection detection and identification of biological warfare (BW) agents (BWA). The system can be controlled and monitored locally and remotely, and automatically interfaces with global positioning, meteorological and communication systems. It is fully hardened and configured for a variety of service designated mobile platforms and battle spaces, including surface ships, wheel vehicles, fixed-sites and man portable applications. The JBPDS's four configuration specific nomenclatures are XM95 Fixed Site, XM96 Man Portable, XM97 Shelter Vehicle, and XM98 Ship. Biological Integrated Detection System (BIDS) platform, XM31E2, will be fitted to accept the XM97 JBPDS. The JBPDS provides both: (1) a means to limit the effects of BWA attacks and the potential for catastrophic effects to U.S. forces and (2) assistance to medical personnel in determining effective preventive measures, prophylaxis, and the appropriate treatment if exposure occurs. It is a first time defense capability for the US Marine Corps and US Air Force and replaces interim capabilities for the US Navy Interim Biological Agent Detection System (IBADS) and US Army (BIDS NDI and BIDS P3I). Current national military strategy specifies a worldwide force projection capability that requires detection, identification, and vaccination in order to protect U.S. forces against potential BWA threats. JBPDS meets the Joint Chief's urgent need to enhance the survivability of U.S. forces and support the Office of the Undersecretary of Defense (Acquisition) mission areas #220; #225; and #276. The JBPDS replaces interim systems that are dependent upon accurate intelligence, suspicious munitions or events, time consuming laboratory analysis, or the onset of illness among U.S. forces before a biological attack can be detected, and do not always provide operational commands a reliable means to effectively mitigate the possible effects of a BWA attack.

The Engineering and Manufacturing Development JBPDS prototype fully integrates a wetted wall cyclone collector, aerosol particle size counter, flow cytometer, fluid transfer system and automated hand held assay reader into a biological sensor suite. The sensor suite, which is operated by two on-board controllers and a touch-pad screen display, also includes commercial telemetry, global positioning, meteorological and network modem devices. The basic suite weighs 321 lbs. and measures 38"Wx42"Hx22"D, while the portable suite weighs 211 lbs. and measures 33"Wx31"Hx32"D. The JBPDS also integrates a power conditioner, uninterruptable power supply, air cooler and heater into an external control unit (ECU) for stand-alone use on fixed-site and man portable platforms. The basic unit's ECU weighs 467 lbs. and measures 30"Wx30"Hx22"D, while the portable unit's ECU weighs 306 lbs. and measures 27"Wx27"Hx30"D.

JUSTIFICATION: FY00 will procure JBPDS as follows: 5 Fixed Site configured JBPDS for the Air Force; 5 Man Portable configured JBPDS (one for Army Special Forces and 4 for the Air Force); 12 sheltered Vehicle configured JBPDS (1 for the Air Force, 8 for the Army, and 3 for Army Special Forces); and 3 Ship Board configured JBPDS for the Navy. FY01 continues procurement of the aforementioned systems as follows: 20 Fixed Site configured for the Air Force; 46 Man Portable configured JBPDS (11 for the Air Force, 15 for Army Special Forces, and 20 for the Marine Corps); 64 Sheltered Vehicle configured JBPDS (38 for the Army and 26 for the Marine Corps); and 13 Ship Board configured JBPDS for the Navy. A total of 843 systems will be procured.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)

Program Elements for Code B Items:

0604384BP, Project BJ5

Code:

B

Other Related Program Elements:

B

RDT&E Code B Item

The JBPDS provides a first time capability to automatically collect, detect and identify the presence of all Category A Biological Warfare Agents, as listed by the International Task Force-6 report, dated Feb 90.

FY98 and prior - \$32.9 M; FY99 - \$27.4 M; FY00 - \$10.6M.

The current development and test status is as follows:

Engineering Design Test (EDT) - Mar 99-May00

Production Qualification Test (PQT)/Operation Evaluation (OE) - Apr-May 00

Performance Based Technical Data Package (TDP) will be available Mar 00

Low Rate Initial Production decision Aug 00.

Initial Operational Test and Evaluation (IOT&E) - Apr-May 01

The projected date for Quad-Service acceptance and Milestone Decision Authority approval is Aug 01

Remarks: Formal government testing will be performed concurrently on the XM95, XM96, XM97 and XM98.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware (Integrated Suite of Components)														
XM95 Fixed Site		B						1898	5	379.601	7027	20	351.351	
Mechanical/Electrical & Data Hook-up								50	5	10.001	180	20	9.001	
M42 Alarm								12	5	2.401	49	20	2.451	
XM96 Man Portable		B						1843	5	368.601	15808	46	343.653	
Electrical & Data Hook-up								10	5	2.001	83	46	1.805	
KW Generator (2)								20	5	4.001	184	46	4.001	
M42 Alarm								12	5	2.401	113	46	2.457	
NATO Slave Cable								8	5	1.601	75	46	1.631	
XM97 Shelter Vehicle		B						4401	12	366.751	21834	64	341.157	
Mechanical/Electrical & Data Hook-up								120	12	10.001	576	64	9.001	
NATO Slave Cable								18	12	1.501	104	64	1.626	
XM98 Ship		B						1157	3	385.667	5081	13	390.847	
Mechanical/Electrical & Data Hook-up								180	3	60.001	702	13	54.001	
2. First Article Tests								949			750			
3. Non-Recurring Engineering								4154						
4. Technical Manuals								1224						
5. Quality Control								500			300			
6. Engineering Support								944			730			
7. Retrofit LRIP systems								5114	25	204.561				
TOTAL								22614			53596			

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JP0100) JOINT BIO POINT DETECTION SYSTEM (JBPDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
XM95 Fixed Site (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Aug-00	Mar-01	5	392003	No	Mar-00	Apr-00
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Aug-01	Dec-01	20	362803	No	May-01	Aug-01
XM96 Man Portable (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Aug-00	Mar-01	5	378605	No	Mar-00	Apr-00
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Aug-01	Dec-01	46	353547	No	May-01	Aug-01
XM97 Shelter Vehicle (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Aug-00	Feb-01	12	378253	No	Mar-00	Apr-00
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Aug-01	Dec-01	64	351784	No	May-01	Aug-01
XM98 Ship (with Platform I&C & ASIOE) FY 00	TBS	C/FPM-5(1)	SBCCOM, APG, MD	Aug-00	Apr-01	3	445668	No	Mar-00	Apr-00
FY 01	TBS	C/FPM-5(2)	SBCCOM, APG, MD	Aug-01	Dec-01	13	414925	No	May-01	Aug-01

REMARKS: Components of End Item (COEI) for each configuration includes:

Identifier*	Fluid Transfer System*	Controllers* Enclosure*	Mini Collector**	BAWS**	Operator Displays#	Transit Case#	Shock Isolators#	Power Conditioner#	Environmental Control Unit#	Telemetry/MET/GPS
XM95	x	x	2x	2x	x	x	x	x	x	x
XM96	x	x	2x	2x	x	x	no	no	x	x
XM97	x	x	2x	x	x	x	2x	no	x	x
XM98	x	x	2x	x	x	x	3x	no	x	x

Key: * = Developmental Item ** = Modified Commercial Off the Shelf(COTS) # = COTS

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JPO210) CRITICAL REAGENTS PROGRAM (CRP)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	1.7	2.4	1.9	1.9	2.0	1.8	1.9	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	1.7	2.4	1.9	1.9	2.0	1.8	1.9	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	1.7	2.4	1.9	1.9	2.0	1.8	1.9	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Critical reagents are required for the detection and identification of biological warfare (BW) agents. Multiple medical and non-medical platforms require a continuous, quality supply of critical reagents for effective warning which significantly enhances force survivability. They are also required for rapid medical diagnosis and treatment of exposed personnel. A common set of reagents for all platforms is required. The Critical Reagent Program (CRP) will ensure the quality and availability of reagents that are critical to the successful development, test and operation of biological warfare detection systems and medical biological products. The CRP integrates and consolidates all Department of Defense (DoD) reagents/antibodies/DNA biological detection requirements Program Definition and Risk Reduction (PDRR) through production. The CRP will ensure the availability of high quality reagents, Hand Held Immunochromatographic Assays (HHA), throughout the life cycle of all systems managed by the Joint Program Office for Biological Defense to include Biological integrated Detection System (BIDS), Interim Biological Agent Detection System (IBADS), Joint Biological Point Detection System (JBPDS), Airbase/Port Biological Detection (Portal Shield), and the Joint Biological Remote Early Warning System (JBREWS). The CRP also supports the Navy Forward Deployed Lab, the Theater Army Medical Lab (TAML), the Army Technical Escort Unit (TEU), the Marine Corps Chemical-Biological Incident Response Force (CBIRF), other counter-terrorist and special reconnaissance teams, and foreign countries. The CRP is also responsible for the production of Hand Held Immunochromatographic Assays (HHA).

JUSTIFICATION: In FY01 62 grams of antibody are procured along with 4 grams of target agents and 32,000 Polymerase Chain Reactions (PCR) assays.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JPO210) CRITICAL REAGENTS PROGRAM (CRP)

Program Elements for Code B Items:

0604384BP, Project BJ5

Code:

B

Other Related Program Elements:

B

RDT&E Code B Item

The Critical Reagent Program (CRP) will ensure the quality and availability of reagents that are critical to the successful development, test and operation of biological warfare detection systems and medical biological products.

FY98-\$2.6; FY99-\$3.8M; FY00-\$3.0M; FY01-\$1.1M; FY02-\$1.1M; FY03-\$1.1M; FY04-\$1.1M; FY05-\$1.2M

FY98-Produced reagents in support of testing and development of the AirBase/Port Biological Detection (Portal Shield) System, the BIDS P3I, and the JBPDS. Established a limited prototype production line for HHAs. Provided HHAs of Operation Desert Thunder, to support the Army's BIDS, the Navy's IBAD and 2 foreign militaries. Began planning and budgeting for an antibody-gene probe and primer repository at Edgewood Chemical Biological Center (ECBC) and an agent/interferent repository at Dugway Proving Grounds (DPG).

FY99-Developed five new antibody based reagents and associated HHAs to support the development of the Airbase/Port Biological Detection (Portal Shield) System and Joint Biological Point Detection System (JBPDS) Block I. Established Reagent Repositories at ECBC and DPG.

FY00-Develop five new antibodies against additional five threat agents in support of Joint Program Office for Biological Defense (JPO-BD) managed biological defense systems.

FY01-Develop and transition antibodies against an additional five threat agents.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JPO210) CRITICAL REAGENTS PROGRAM (CRP)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Antibodies (grams)					1533	146	10.500	1500	134	11.194	720	62	11.612	
Gene Probes and Primers (per thousand assays)											471	32000	0.014	
Target Agents (grams)								542	21	25.809	108	4	27.000	
Production Support					202									
Repository Costs								34			125			
QA/QC Support								336			487			
TOTAL					1735			2412			1911			

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JPO210) CRITICAL REAGENTS PROGRAM (CRP)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Anti-bodies* FY 99	National Micrographics Systems, Silver Spring, MD	C/FFP	Fort Detrick, MD	Jul-99	Oct-99	146	10500	Yes		
FY 00	National Micrographics Systems, Silver Spring, MD	C/FFP	Fort Detrick, MD	Apr-00	Jul-00	134	11194	Yes		
FY 01	TBS	C/FFP	Fort Detrick, MD	Nov-00	Feb-01	62	11612	Yes		
Gene Probe/Primers** FY 01	TBS	C/FFP	Fort Detrick, MD	Nov-00	Feb-01	32000	14	No		
Target Agents*** FY 00	US Army Dugway Proving Ground (DPG) UT	MIPR	Falls Church, VA	Nov-99	Jan-00	21	25812	Yes		
FY 01	US Army Dugway Proving Ground (DPG) UT	MIPR	Falls Church, VA	Nov-00	Jan-01	4	27000	Yes		

REMARKS: *Anti-body quantities are in grams.
 **Gene probe/primer quantities are in number of assays.
 *** Target Agent quantities are in grams.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JPO220) LONG RANGE BIO STANDOFF DET SYS (LRBSDS)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	0	0	0	0	3	3	0	0	0	0	6
Gross Cost	0	0	0	0	1.9	11.7	11.8	0	0	0	0	25.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	1.9	11.7	11.8	0	0	0	0	25.4
Initial Spares												
Total Proc Cost	0	0	0	0	1.9	11.7	11.8	0	0	0	0	25.4
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Counterproliferation (CP) Long Range Biological Standoff Detection System (LRBSDS), XM94E1, is a helicopter-mounted, long-range, large-area standoff aerosol detector, tracker and mapper system. The system employs Light Detection and Ranging (LIDAR) technology which detects aerosol clouds at ranges up to 50 km or more. The detector has three major components: a pulsed-infrared laser transmitter, a receiving telescope, and an information processor integrated into a frame. This system is used in conjunction with mobile biological detection sensor systems (e.g., Biological Integrated Detection System (BIDS), Joint Biological Point Detection System (JBPDS)).

JUSTIFICATION: The CP-LRBSDS, XM94E1, provides commanders with an effective system to detect the presence of a biological warfare (BW) aerosol at a standoff distance and provide advanced warning to U.S. forces. Advanced warning will provide commanders with adequate decision time to mitigate the potential effects of a BW attack. The primary purpose of the CP-LRBSDS is to limit the effects of large area coverage biological agent attacks which have the potential for catastrophic effects to U.S. forces at the operational level of war. The XM94 was fielded in FY97 to meet the interim requirements for CP-LRBSDS. The XM94E1 will replace the XM94 and will improve performance and meet the CP-LRBSDS objective requirements with longer detection range, an eye-safe transmitter, automatic discrimination of aerosol clouds, stabilized platform and a reduction from two operators to one. Electronic and optical long lead components will be procured in FY00 after a special IPR. These components will be used in FY01 and FY02 to produce a total of 6 LRBSDS. FY01 funding procures three CP-LRBSDSs, equipment for training, additional support items and spare parts.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JPO220) LONG RANGE BIO STANDOFF DET SYS (LRB SDS)

Program Elements for Code B Items:

603884BP, ProjCP4/0604384BP, ProjCP5

Code:

B

Other Related Program Elements:

RDTE Code B Item

The Counterproliferation (CP) Long Range Biological Standoff Detection System (LRB SDS), XM94E1, is a helicopter-mounted, long-range, large-area standoff aerosol detector, tracker and mapper system. The system employs Light Detection and Ranging (LIDAR) technology which detects aerosol clouds at ranges up to 50 km or more.

FYs: 1998 - \$12.8; 1999 - \$10.9; 2000 - \$5.5

EDT: Nov 98 - Aug 99

Developmental Testing: Jul 99

Operational Testing: Mar 00 - Jun 00

FUE: 1st Quarter FY01 (RDTE prototypes)

TC: 4th Quarter FY00

FUE: 3rd Quarter FY02 (Production units)

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JPO220) LONG RANGE BIO STANDOFF DET SYS (LRBSDS)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
CP-LRBSDS SYSTEMS														
1. Hardware														
LRBSDS System		B										7650	3	2550.000
2. Long Lead Components														
Diodes for Lasers								1152	1920	0.600				
Receiver Telescope								618	6	103.000				
3. Institutional Training														
Institutional Trainer												500	1	500.000
Instructor Station												500	1	500.000
4. Engineering Support														
In-House								137				973		
Quality Assurance*												550		
5. System Fielding Support														
ASIOE												360		
Initial Spare Parts												900		
NET												200		
OGA												100		
*NOTE: Quality Assurance in FY01 is for Physical Configuration Audit/Functional Configuration Audit														
TOTAL									1907			11733		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JPO220) LONG RANGE BIO STANDOFF DET SYS (LRBSDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CP-LRBSDS Systems FY 01	Schwarz Electro Optics, Orlando, FL	SS/FP	SBCCOM, APG, MD	Nov-00	Jul-01	3	2550000	Yes		
Laser Diodes FY 00	Spectral Diode Labs, San Jose, CA	SS/FP	SBCCOM, APG, MD	Mar-00	Jun-00	1920	60000	Yes		
Receiver Telescope FY 00	Aspheric Technologies, Tampa, FL	SS/FP	SBCCOM, APG, MD	Mar-00	Jun-00	6	103000	Yes		

REMARKS: Long Lead Components consist of: Receiver Telescope, Laser Chiller, LCD Display

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JPO230) PORTAL SHIELD EQUIPMENT

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	14.6	3.9	24.7	3.9	0	0	0	0	47.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	14.6	3.9	24.7	3.9	0	0	0	0	47.1
Initial Spares												
Total Proc Cost	0	0	0	14.6	3.9	24.7	3.9	0	0	0	0	47.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Air/Base Port Biological Detection (Portal Shield) System is comprised of a suite of detection sensors that are networked via land line or RF communications to a computer which resides within the installation Command Post (CP)/Emergency Operations Center (EOC). The system uses algorithms and decision logic to minimize false alarms and to provide installation commanders with automated detection and warning of Biological Warfare (BW) attacks. The Air/Base Port Biological Detection (Portal Shield) prototypes provide a new capability to installation commanders. There are no other systems capable of providing reliable point detection of BW attack in the US inventory. The Air Base/Port Biological Detection (Portal Shield) has successfully demonstrated the ability to provide critical force protection of CINC designated high-value, fixed-site assets.

JUSTIFICATION: In response to Operational Needs Statements from each of the sponsoring CINCs the JPO-BD has been directed to fabricate, install, and support additional Portal Shield systems to protect military sites in CENTCOM and PACOM areas of responsibility. FY01 sensors are required to protect additional critical sites in CENTCOM and PACOM.

NOTE: The Air Base/Port Biological Detection (Portal Shield) program was initiated in FY96 as an ACTD program for Biological Detection of high-value CINC fixed sites (airbases, ports). The Mark II prototype systems was successfully tested for operational utility in September 1997 at Dugway Proving Ground, Utah. The Mark II prototype system was successfully deployed to Kuwait in February 1998 in support of Operation Desert Thunder. The Department of Defense (DoD) authorized \$26 Million for additional systems to begin production in FY99 and the Contract Logistics Support (CLS) for those systems. The DoD provided funding for additional systems scheduled to begin production in FY 01. CLS funding for these additional systems was provided directly to the services.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JPO230) PORTAL SHIELD EQUIPMENT			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Fabrication	B				10850	70	155.000							
Management/Engineering Support					3010			1304			1215			
System Fielding					221			157			12			
Initial Spares					196									
Technical/Program Documentation					108			116			119			
Contractor Logistics Support (CLS)					179			2300			2400			
Hardware Fabrication	B										19400	97	200.000	
Management/Engineering Support											264			
System Fielding											836			
Initial Spares											500			
TOTAL					14564			3877			24746			

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (JPO230) PORTAL SHIELD EQUIPMENT
---	---------------------	---

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Sensors FY 99	Camber Corp. Inc., Washington, DC	SS/FFP	JPO-BD, Washington DC	Jan-99	Jul-99	70	155000	Yes		
FY 01	Camber Corp. Inc, Washington, DC	FFP/Option	JPO-BD, Washington DC	Jan-01	Jun-01	97	200000	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JX0005) DOD BIOLOGICAL VACCINE PROCUREMENT

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	11.8	26.1	14.8	48.6	49.8	40.4	45.6	60.8	64.0	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	11.8	26.1	14.8	48.6	49.8	40.4	45.6	60.8	64.0	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	11.8	26.1	14.8	48.6	49.8	40.4	45.6	60.8	64.0	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The currently licensed Anthrax Vaccine Adsorbed (AVA) will be procured from the manufacturer, BioPort Corporation. The current direction is to provide 2.4M Troop Equivalent Doses (TED) of licensed Anthrax Vaccine. All other requirements are based on 1.2M TEDs of vaccines for high threat biological warfare (BW) agents, and 0.3M TEDs for all other BW threats. The Joint Biological Defense program focus for the other vaccine acquisition is on the prime systems contract approach of the Joint Vaccine Acquisition Program (JVAP) in which the prime contractor will manage biological defense medical products to include: full-scale licensed vaccine production, stockpiling, testing, and distribution. Products to be procured and stockpiled under the JVAP include: recombinant botulinum vaccine, next generation anthrax vaccine, plague vaccine, Q fever vaccine, ricin vaccine, smallpox vaccine, tularemia vaccine and Venezuelan Eastern Encephalitis (VEE) vaccine, combined VEE/Eastern Equine Encephalitis/Western Equine Encephalitis (VEE/EEE/WEE) vaccine.

JUSTIFICATION: Operating forces have a critical need for defense from worldwide proliferation of biological warfare capabilities. The medical portion of the Joint Biological Defense Program provides U.S. forces with Food and Drug Administration (FDA) approved vaccines to protect against current and emerging threats, which could be deployed against maneuver units or stationary facilities in the theater of operations. FY01 procures the FDA-licensed Anthrax vaccine absorbed doses to support the Secretary of Defense's immunization program.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JX0005) DOD BIOLOGICAL VACCINE PROCUREMENT

Program Elements for Code B Items:

0603884BP, Project MB4/Project MB5

Code:

B

Other Related Program Elements:

RD&E Code B Item

The Joint Biological Defense Program will provide U.S. forces with FDA-licensed vaccines to protect against current and emerging validated threat agents.

FY97 - \$10.3M; FY98 - \$17.7M; FY99 - \$23.1M; FY00 - \$36.6M; FY01 - \$54.2M; FY02 - \$89.5M; FY03 - \$99.7M; FY04 - \$67.8M; FY05 - \$53.6M

FY97: Awarded the prime systems contract for the Joint Vaccine Acquisition Program (JVAP). Completed safety studies for botulinum antiserum (despeciated) and phase I effort studies for botulinum toxoid F vaccine. Conducted data collection/analysis and prepared license application to the FDA for botulinum pentavalent vaccine, supported the special immunization program in laboratory and field environments.

FY98: Continued vaccine test and evaluation efforts, conducted botulinum A-E clinical and animal studies and prepared Establishment License Application/Product License Application documentation, conducted Anthrax vaccine licensure and vulnerability analysis efforts, continued supporting the special immunization program.

FY99: Continued phase I effort studies for smallpox vaccine. Began phase I effort for the recombinant and Venezuelan Equine Encephalitis vaccines. Conducted phase II studies for tularemia and Q fever vaccines, continued clinical trials to complete data collection/analysis to submit license application to the FDA for Botulism Pentavalent Toxoid vaccine.

FY00: Continued phase I efforts for tularemia, botulinum and smallpox vaccines, initiated efforts for plague and ricin vaccines. Continued phase II efforts for Q fever, and botulinum vaccines, started evaluation to reduce the Anthrax immunization schedule.

FY01: Continue phase I effort for tularemia, smallpox, VEE, plague and ricin vaccines, initiate phase I studies for the next generation Anthrax vaccine. Continue phase II efforts for Q fever and botulinum vaccines, initiate phase II efforts for smallpox vaccine and complete the first phase of Anthrax reduced immunization schedule.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JX0005) DOD BIOLOGICAL VACCINE PROCUREMENT			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Vaccine Production (Doses of Anthrax Vaccine)		B				12768	1200	10.641	36176	3400	10.641	28628	3400	8.421
Other BioDefense Medical Product Storage and Testing						90			1904			5077		
Anthrax Vaccine: Oversight, Testing, Labeling, Shipping and Security						1960			10554			16090		
FY 99 and FY 00 cost per dose increased in accordance with P.L. 85-804, Memorandum of Decision.														
Note: Quantities are in thousands.														
TOTAL						14818			48634			49795		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (JX0005) DOD BIOLOGICAL VACCINE PROCUREMENT					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Anthrax Vaccine Production FY 99	Bioport, Lansing, MI	OPT 1	USAMRAA, Fort Detrick, MD	Aug-99	May-00	1200	10640	Yes		
FY 00	Bioport, Lansing, MI	OPT 2	USAMRAA, Fort Detrick, MD	Nov-99	Jun-00	3400	10640	Yes		
FY 01	Bioport, Lansing, MI	TBD	USAMRAA, Fort Detrick, MD	Nov-00	Jan-01	3400	8420	Yes		

REMARKS: FY 99 and FY 00 cost per dose increased in accordance with Public Law 85-804, Memorandum of Decision as executed on 28 July 1999 providing extraordinary contractual relief in the form of an amendment without consideration. Contract award and delivery dates are in concert with the program changes as updated with the Memorandum of Decision and the contract modification dated 4 August 99 to facilitate upgrade of manufacturing plant to comply with Food and Drug Administration (FDA) requirements. Quantities shown are doses in thousands.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	41	14	28	21	20	0	0	0	0	0	0	124
Gross Cost	22.0	20.9	37.0	14.1	19.3	0	0	0	0	0	0	113.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.0	20.9	37.0	14.1	19.3	0	0	0	0	0	0	113.3
Initial Spares												
Total Proc Cost	22.0	20.9	37.0	14.1	19.3	0	0	0	0	0	0	113.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Biological Integrated Detection System (BIDS) is an early warning and identification capability in response to a large area (theater) Biological Warfare (BW) attack. The system is a detection suite installed in a shelter which is mounted on a dedicated vehicle with generator and trailer power supply. Other BIDS elements include collective protection, environmental control, and storage for supplies, GPS, MET and radios. The BIDS pre-planned product improvement BIDS (P3I) system is equipped with a detection suite to include a particle sampler, particle counter/sizer, biological detector and chemical-biological mass spectrometer. The shelter may be removed from the vehicle for fixed site application. The BIDS program is conducted in three phases. Phase I was the non-developmental item (NDI) BIDS. Phase II is the P3I which will provide technology insertion to upgrade from concurrent developmental efforts for the NDI (four agent detection capability) core configuration to an eight agent detection capability. The acquisition plan to procure the BIDS is phased as follows: (1) 41 NDI BIDS; (2) 42 P3I BIDS. The JBPDS is the objective detection suite consisting of complementary trigger, sampler, detector and identification technologies to detect and identify the full range of biological agents in real-time. The JBPDS will provide a common point detection capability for all Services and meet the Service requirements as outlined in the Joint Operational Requirements Document (JORD). JBPDS Army platform production will begin in FY99 to ensure availability for integration of the JBPDS beginning in FY01.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Mil Std Equipment														
S788 LW Multipurpose Shelter					700	28	25.000	331	13	25.461				
2. Commercial Equipment														
HF Radio					2055	28	73.392	971	13	74.692				
UV Aerosol Particle Sizer														
Mini Flow Cytometer														
CB Mass Spectrometer														
Bio Detector														
Biological Samplers*														
3. Auxiliary Equipment					1830	21	87.142	1471	20	73.550				
5. In-House Assembly of JBPDS Platforms					4749	21	226.142							
6. Contractor Assembly of JBPDS Platforms								5451	20	272.550				
7. Engineering Support					1128			1248						
8. QA Support					376			416						
9. Testing														
10. System Fielding Support					3244			7031						
11. War stock								2291						
Note: There will be a total of 42 BIDS P3I Systems. For each system, 13 extra items have been purchased (5 for training, 8 for spares)														
TOTAL					14082			19210						

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
JBPDS Platforms Assembly FY 99	SBCCOM, APG, MD	In-House	SBCCOM, APG, MD	Sep-99	Feb-00	21	226142	No		
FY 00	SBCCOM, APG, MD	In-house	SBCCOM, APG, MD	Dec-99	Dec-00	20	272550	No		

REMARKS: The JBPDS Platform design will include items common to the P3I BIDS. Fabrication of these items can begin prior to final approval of the complete JBPDS Platform design.

FY 01 / 02 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
(M93001) BIO INTEGRATED DETECTOR SYSTEM (BIDS)

Date:
FEBRUARY 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 99												Fiscal Year 00												L A T T E R
							Calendar Year 99												Calendar Year 00												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	
BIDS P3I (ASSEMBLY)	1	FY 97	A	14	14																										
BIDS P3I (ASSEMBLY)	1	FY 98	A	28		28		7																							
JBPDS PLATFORMS ASSEMBLY	2	FY 99	A	21		21																									
JBPDS PLATFORMS ASSEMBLY	3	FY 00	A	20		20																					20				

O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E
T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	CBDCOM for BIDS P3I	2	3	8	0	1	INITIAL	0	11	8	JBPDS numbers are for platform assembly only. FY99 award slippage due to design change.
							REORDER	0	3	11	
2	SBCCOM for JBPDS Platforms	2	3	8	0	2	INITIAL	0	3	11	14
								REORDER	0	3	5
3	TBS	2	3	8	0	3	INITIAL	0	2	13	15
								REORDER	0	0	0
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(PA1600) COLLECTIVE PROTECTION

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	11.1	5.3	24.3	21.2	36.4	36.2	36.8	34.4	44.7	44.2	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	11.1	5.3	24.3	21.2	36.4	36.2	36.8	34.4	44.7	44.2	Continuing	Continuing
Initial Spares												
Total Proc Cost	11.1	5.3	24.3	21.2	36.4	36.2	36.8	34.4	44.7	44.2	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The objective of the Chemical/Biological (CB) Collective Protection program is to provide CB Collective Protection systems. The CB Collective Protection systems will be smaller, lighter, less costly and more easily supported logistically at the crew, unit, ship and aircraft level. Collective protection platforms include shelters, vehicles, ships, aircraft, buildings and hospitals. Collectively Protected Deployable Medical System (CP DEPMEDS) is a kit that will be fielded with selected fielded DEPMEDS hospitals to convert the hospital into a fully operational environmentally controlled, collectively protected medical treatment facility. The Transportable Collective Protective System procures components and assembling them into transportable kits that will provide CB collective protection facilities when deployed in high threat CB theaters. The Amphibious Ship Collective Protection System (CPS) installs the CPS in mission critical medical and command and control spaces on three Navy amphibious ship classes: LHA, LHD, and LSD. The Chemical Biological Protective Shelter (CBPS) is a new system designed to replace the M51 Chemical Protective Shelter. The CBPS provides a contamination free, environmentally controlled working area for medical, combat service, and combat service support personnel to obtain relief from the continuous need to wear chemical-biological protective clothing for greater than 72 hours of operation.

JUSTIFICATION: Operational forces across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions have an immediate need to safely operate, survive and sustain operations in a nuclear, biological and chemical (NBC) agent threat environment. Operating forces have a critical need for defense against worldwide proliferation of NBC warfare capabilities and for medical treatment facilities.

Exhibit P-40M, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(PA1600) COLLECTIVE PROTECTION

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	PRIOR	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
	Collective Protection Amphib Backfit (LHD)	0.0	0.9	9.7	9.2	11.0	0.8	7.4	11.1	3.8	53.9
	Collective Protection Amphib Backfit (LSD)	0.0	0.0	0.0	0.0	1.6	2.1	0.4	0.0	4.5	8.6
	Collective Protection Amphib Backfit (LHA)	0.0	0.1	2.4	8.5	5.1	14.4	11.6	7.9	0.0	50.0
	JCPE - Improved Airlock	0.0	0.0	0.6	0.5	0.1	0.0	0.0	0.0	0.0	1.2
	JCPE - Improved Environmental Control Unit	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	1.2
	JCPE - Improved Motor Blowers	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.1	5.1
	JCPE - Improved Filters	0.0	0.0	0.0	0.0	0.6	0.7	0.2	0.2	0.0	1.7
	Totals	0.0	1.0	13.3	18.8	18.4	18.0	22.1	21.7	8.4	121.7

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (PA1600) COLLECTIVE PROTECTION			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Collectively Protected Deployable Medical System									2746			5964		
Transportable Coll. Prot. Sys.					3852				6527					
Collective Prot Amphibious Backfit					1000				12058			17693		
Joint Coll Prot System & Improvements									1193			1052		
CB Protective Shelter (CBPS)					16311				13910			11470		
TOTAL					21163				36434			36179		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JCP001) COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	0	0	0	3	8	3	0	0	0	0	14
Gross Cost	0	0	0	0	2.7	6.0	2.0	0	0	0	0	10.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	2.7	6.0	2.0	0	0	0	0	10.7
Initial Spares												
Total Proc Cost	0	0	0	0	2.7	6.0	2.0	0	0	0	0	10.7
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Collectively Protected Deployable Medical System (CP DEPMEDS) is a kit that will be fielded with selected fielded DEPMEDS hospitals to convert the hospital into a fully operational environmentally controlled, collectively protected medical treatment facility. The requirement is to be able to sustain medical operations in a Chemical Biological (CB) environment for 72 hours. The following components are required to be added to existing DEPMEDS hospitals to provide a fully operational collectively protected field hospital: M28 Simplified Collective Protection Equipment, CB hardened International Standard Organizational (ISO) Shelter Seals, CB Protected Water Distribution System, CB Protected Latrines, Low Pressure Alarms and CB Protected Environmental Control Units and Heaters.

JUSTIFICATION: Currently fielded DEPMEDS hospitals do not have the ability to sustain medical operations in a CB environment. There is a critical need for medical functions requiring the need for removal of individual protective clothing and masks. FY01 funds will support procurement of components required to provide a fully operation collectively protected field hospital.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JCP001) COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. CPDEPMEDS		A												
M28 CPE & Retrofit									296	3	98.666	789	8	98.625
CB Water Distribution									90	3	30.000	240	8	30.000
CB Latrines									348	3	116.000	928	8	116.000
CB ISO Shelters									228	3	76.000	608	8	76.000
Low Pressure Alarms									70	3	23.333	187	8	23.375
Overpack/Accessory Kit									218	3	72.666	581	8	72.625
Assemblage									15	3	5.000	40	8	5.000
Military Vans (MILVANS)									120	3	40.000	320	8	40.000
CB ECU									234	3	78.000	624	8	78.000
Tent, Extendable Mobile Personnel (TEMPER)									75	3	25.000	200	8	25.000
Components														
2. Training Sets									302	5	60.400	604	10	60.400
3. Engineering														
Government									582			649		
4. Data									168					
5. System Fielding Support												194		
TOTAL									2746			5964		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (JCP001) COLLECTIVELY PROTECTED DEPLOYABLE MEDICAL SYSTEM
---	---------------------	--

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CPDEPMEDS FY 00	TBS	C/FFP	SBCCOM	Apr-00	Jan-01	3	564665	No	Jan-00	
FY 01	TBS	FFP/Option	SBCCOM	Dec-00	May-01	8	564625	No	Jan-00	

REMARKS: Unit cost for CP DEPMEDS shows an increase from the FY00 President's Budget due to the need to procure additional components to include CB protected environmental control units, MILVANS to store and transport CP DEPMEDS specific components, and additional shelter components to house M28 CPE Patient Processing Units, supply airlocks and CB water distribution system. These components were originally going to be GFE and reclaimed from the hospital units that CP DEPMEDS is replacing, but suitable equipment could not be reclaimed.

Training sets need to be procured for New Equipment Training to support initial fielding. The training sets are fully functioning training mock-ups, using common components found in all areas of the CP DEPMEDS. The majority of the components for the training sets are GFE, but portions require procurement from the contractor.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JF0102) TRANSPORTABLE COLLECTIVE PROT SYS

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	4.7	3.9	6.5	0	0	0	0	0	0	15.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	4.7	3.9	6.5	0	0	0	0	0	0	15.1
Initial Spares												
Total Proc Cost	0	0	4.7	3.9	6.5	0	0	0	0	0	0	15.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Transportable Collective Protective System program supports Headquarters Pacific Air Force/Civil Engineer (HQ PACAF/CE) by procuring components and assembling them into transportable kits that will provide Chemical Biological (CB) collective protection facilities when deployed in high threat CB theaters. Each kit uses the M28 Collective Protection Equipment (CPE) liner system (Tent, Extendable Modular Personnel [TEMPER] tent liner/suspension systems, and if necessary, tent material) that is designed to provide CB protection for the Army Deployable Medical Systems. In addition, each kit contains the necessary CB filtration; air distribution, conditioning, and pressurization (Chem-Bio Hardened Air Mgt Plant); and the chemical air processing systems (for personnel decontamination). The components will be assembled into four kit types. One configuration uses a 64-foot TEMPER tent (with M28 CB liners) for stand-alone protection and will be used primarily for training. The second configuration allows a larger personnel capacity and provides operational stand-alone protection with a 96-foot TEMPER tent (with M28 CB liners). The third configuration furnishes components for collective protection in existing non-CB protected facilities and it renders the largest personnel protection capacity. For FY 00, a fourth kit configuration was added which uses high personnel-capacity TEMPER tents (with M28 liners) to provide stand-alone protection.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JF0102) TRANSPORTABLE COLLECTIVE PROT SYS			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware														
Chem-Bio Hardened Air Mgt Plant		A				1649	17	97.001	2622	23	114.001			
Collective Protection Equipment (includes: M28 Liner Packages, 200 CFM Filter, Recirculation Filter Element, Filter Interface)		A				1519			2791					
Misc Shelter Equipment (includes: TEMPERS 64 ft., 98 ft., and 128 ft.)		A				409			512					
2. Engineering Support						200			497					
3. Assembly						75			105					
TOTAL						3852			6527					

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (IF0102) TRANSPORTABLE COLLECTIVE PROT SYS						
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
Hardware-CB Hardened Air MGT Plant FY 99	Engineered Air Systems, St. Louis, MO	FFP/Option	Brooks AFB, TX	Feb-99	Oct-99	17	97000	Yes			
FY 00	Engineered Air Systems, St. Louis, MO	FFP/Option	Brooks AFB, TX	Dec-99	Jun-00	23	114000	Yes			

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JN0014) COLLECTIVE PROT SYS AMPHIB BACKFIT

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	1.0	12.1	17.7	17.7	17.3	19.4	18.9	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	1.0	12.1	17.7	17.7	17.3	19.4	18.9	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	1.0	12.1	17.7	17.7	17.3	19.4	18.9	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The anticipated threat of weapons of mass destruction (WMD) has reinforced the need to provide better defensive measures to protect personnel and vital ship spaces from toxic chemical, biological agents and radioactive fallout. The Collective Protection System (CPS) Backfit Program was funded as a result of the 1997 Quadrennial Defense Review (QDR) for installation of CPS in mission critical medical and command and control spaces on three Navy amphibious ship classes: Landing Helicopter Assault (LHA), Landing Helicopter Dock (LHD), and Landing Ship Dock (LSD). CPS is integrated with the ship's Heating Ventilation and Air-conditioning (HVAC) systems and provides filtered supply air for over-pressurization of specified shipboard zones to keep contamination from entering protected spaces. CPS eliminates the need for the ship's crew to wear protective gear (i.e., suits, masks). CPS will be backfitted on high priority ships and is adaptable to any ship air flow requirements.

JUSTIFICATION: FY01 funding will enable the Navy to conduct ship checks, complete Shipboard Installation Drawings (SIDs), procure long lead items, procure installation material, and initiate installations on two LHD class and one LHA class ships.

NOTE: Each quantity listed in this budget indicates a "protective zone". The LHD class of ships will have 4 protective zones per ship: the combat information center (CIC), and three medical zones. The LHA 1 and 5 will also have 4 protective zones per ship: the CIC, two medical zones, and a berthing zone. LHA 2, 3, & 4 have 2 medical zones and 1 berthing zone; the CIC zone is already protected. The LSD will have 2 protective zones, the CIC and a crew sustainability zone.

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0014) Collective Protection System Amphibious Backfit (LHD), Medical Spaces, CIC installation

MODELS OF SYSTEM AFFECTED: Landing Dock Helicopter (LHD) class ship 1-6

DESCRIPTION/JUSTIFICATION:

Shipboard Collective Protection System (SCPS) will be installed on the Landing Dock Helicopter (LHD) ship class (LHD 1-6) in medical spaces and Combat Information Center (CIC). CPS backfit efforts will include ship surveys, engineering design analysis, detail design (Shipboard Installation Drawings (SIDs)), development of modular installation packages, procurement of hardware, logistic warehousing and staging, and installation via Alteration Installation Teams (AITs). Procurement of Government Furnished Equipment (GFE) is required. CPS backfit installation process is being designed to maximize flexibility in procuring, receiving, warehousing, and assembling the necessary installation kits to meet the challenges associated with changing ship availability. Each quantity denotes a protected zone, LHD 1- 6 will have 4 zones per ship (CIC & 3 medical zones).

Note: Installation of equipment is driven by the availability of the ship in dry dock/port.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
CPS Accomplished MS IIIB		1993
CPS Design Improvements		1994-1998
Quadrennial Defense Review cites need for additional ship backfits		1997

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals										5				7				3		
Inputs											4				3					7
Outputs																				

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs						6				3										24
Outputs			1							6					3					24

METHOD OF IMPLEMENTATION:	In House / Contractor	ADMINISTRATIVE LEADTIME:	2 months	PRODUCTION LEADTIME:	4 months
Contract Dates:	FY 1999 N/A	FY 2000	12/99	FY 2001	12/00
Delivery Date:	FY 1999 N/A	FY 2000	03/00	FY 2001	3/01

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0014) Collective Protection System Amphibious Backfit (LHD), Medical Spaces, CIC installation

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment					5	4.4	7	4.9	3	3.2			6	6.5	3	2.9			24	21.9
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data				0.5		0.5		0.3		0.2		0.1		0.3		0.3		0.1		2.3
Training Equipment																				
Support Equipment																				
Other				0.4		0.8		0.7		0.7		0.1		0.6		0.7		0.2		4.2
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					4	4.0	1	1.1											5	5.1
FY 2001 Eqpt -- Kits							2	2.2	5	4.9									7	7.1
FY 2002 Eqpt -- Kits									2	2.0	1	0.6							3	2.6
FY 2003 Eqpt -- Kits																				
FY 2004 Eqpt -- Kits															6	7.1			6	7.1
FY 2005 Eqpt -- Kits																	3	3.5	3	3.5
TC Equip-Kits																				
Total Equip-Kits					4	4.0	3	3.3	7	6.9	1	0.6			6	7.1	3	3.5	24	25.4
Total Procurement Cost				0.9		9.7		9.2		11.0		0.8		7.4		11.0		3.8		53.8

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0014) Collective Protection System Amphibious Backfit (LSD) class (CIC), Berthing, Installation

MODELS OF SYSTEM AFFECTED: Landing Dock Ship (LSD) Class Ship 41,42,&43

DESCRIPTION/JUSTIFICATION:

Shipboard Collective Protection System (CPS) will be installed on the Landing Ship Dock (LSD) ship class (LSD -41, -42, -43) in mission critical Combat Information Center (CIC) and Berthing spaces. CPS backfit efforts will include ship surveys, engineering design analysis, detail design (Shipboard Installation Drawings (SIDs)), development of modular installation packages, procurement of hardware, logistic warehousing and staging, and installation via Alteration Installation Teams (AITs). Procurement of Government Furnished Equipment (GFE) is required. CPS backfit installation process is being designed to maximize flexibility in procuring, receiving, warehousing, and assembling the necessary installation kits to meet the challenges associated with changing ship availability. Each quantity in this budget denotes a protective zone, the 3 LSD class ships will have 2 protective zones, CIC and a crew sustainability zone.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
CPS Accomplished MS IIIB		1993
CPS Design Improvements		1994-1998
Quadrennial Defense Review cites need for additional ship backfits		1997

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																		2		
Inputs																				
Outputs																				

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs																					
Outputs				2										4						4	6
																					6

METHOD OF IMPLEMENTATION:	In-House / Contractor	ADMINISTRATIVE LEADTIME:				PRODUCTION LEADTIME:			
Contract Dates:	FY 1999 N/A	FY 2000	N/A	FY 2001	N/A	FY 2001	N/A		
Delivery Date:	FY 1999 N/A	FY 2000	N/A	FY 2001	N/A	FY 2001	N/A		

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0014) Collective Protection System Amphibious Backfit (LSD) class (CIC), Berthing, Installation

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
	RDT&E																					
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kits, Nonrecurring																						
Equipment									2	1.3							4	1.9	6	3.2		
Equipment, Nonrecurring																						
Engineering Change Orders																						
Data										0.2		0.2		0.2					0.2		0.8	
Training Equipment																						
Support Equipment																						
Other										0.1		0.3		0.2					0.3		0.9	
Interim Contractor Support																						
Installation of Hardware																						
FY 1998 & Prior Eqpt -- Kits																						
FY 1999 Eqpt -- Kits																						
FY 2000 Eqpt -- Kits																						
FY 2001 Eqpt -- Kits																						
FY 2002 Eqpt -- Kits																						
FY 2003 Eqpt -- Kits												2	1.6							2	1.6	
FY 2004 Eqpt -- Kits																						
FY 2005 Eqpt -- Kits																						
TC Equip-Kits																			4	2.1	4	2.1
Total Equip-Kits												2	1.6						4	2.1	6	3.7
Total Procurement Cost										1.6		2.1		0.4					4.5		8.6	

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0014) Collective Protection System Amphibious Backfit (LHA) class ships

MODELS OF SYSTEM AFFECTED: Landing Assault Helicopter (LHA) 1- 5

DESCRIPTION/JUSTIFICATION:

Shipboard Collective Protection System (CPS) will be installed on the Landing Helicopter Assault (LHA) ship class (LHA 1-5) in mission critical Combat Information Center (CIC), Berthing, and Medical Spaces. CPS backfit efforts will include ship surveys, engineering design analysis, detail design (Shipboard Installation Drawings (SIDs)), development of modular installation packages, procurement of hardware, logistic warehousing and staging, and installation via Alteration Installation Teams (AITs). Procurement of Government Furnished Equipment (GFE) is required. CPS backfit installation process is being designed to maximize flexibility in procuring, receiving, warehousing, and assembling the necessary installation kits to meet the challenges associated with changing ship availability. Each quantity in this budget denotes a protective zone: LHA 1 & 5 have 1 CIC, 2 medical zones, and 1 berthing zone. LHA 2, 3, & 4 have 2 medical zones and 1 berthing zone (CIC already protected)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
CPS Accomplished MS IIIB		1993
CPS Design Improvements		1994-1998
SACPS Installed on LHA-2 LHA-4 Combat Information Center (CIC) and Radar Room		1996
Quadrennial Defense Review cites need for additional ship backfits		1997

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals										1				3				4		
Inputs											1									
Outputs											1			3						

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs		7				1				1											17
Outputs			4				6				2	1									17

METHOD OF IMPLEMENTATION:	In-House / Contractor	ADMINISTRATIVE LEADTIME:	2 months	PRODUCTION LEADTIME:	4 months
Contract Dates:	FY 1999	FY 2000	01/00	FY 2001	12/00
Delivery Date:	FY 1999	FY 2000	06/00	FY 2001	03/01

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0014) Collective Protection System Amphibious Backfit (LHA) class ships

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E																				
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment					1	1.5	3	3.4	4	4.5	7	7.5	1	1.7	1	3.2			17	21.8	
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data						0.1	0.1	0.1	0.1	0.4	0.4	0.1	0.1	0.1	0.1	0.1					1.2
Training Equipment																					
Support Equipment																					
Other				0.1		0.5	0.4	0.5	0.5	1.6	0.4	0.4	0.4	0.4	0.4						3.9
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits					1	0.3														1	0.3
FY 2001 Eqpt -- Kits							3	4.6												3	4.6
FY 2002 Eqpt -- Kits										4	4.9									4	4.9
FY 2003 Eqpt -- Kits												6	9.1	1	1.4					7	10.5
FY 2004 Eqpt -- Kits														1	1.4					1	1.4
FY 2005 Eqpt -- Kits														1	1.4					1	1.4
TC Equip-Kits																					
Total Equip-Kits					1	0.3	3	4.6			4	4.9	6	9.1	3	4.2				17	23.1
Total Procurement Cost				0.1		2.4		8.5		5.1		14.4		11.6		7.9					50.0

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JN0017) JOINT COLLECTIVE PROT SYSTEMS & IMPROVEMENTS

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	0	1.2	1.1	0.7	0.7	2.7	2.7	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	1.2	1.1	0.7	0.7	2.7	2.7	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	1.2	1.1	0.7	0.7	2.7	2.7	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The objective of this program is to procure upgraded equipment to support the requirement for Chemical/Biological (CB) Collective Protection systems. Joint Collective Protection Equipment (JCPE) provides needed improvements and cost saving standardization to currently fielded systems. JCPE will use the latest technologies in filtration, shelter materials, and environmental controls to provide affordable, lightweight, easy to operate and maintain equipment. The Bump Through Door (BTD) airlock is required to process more personnel at a faster rate. It will replace the ambulatory airlock and the Tunnel Airlock for Litter Patients (TALP) when used with hospital applications and to replace the ambulatory airlock (protective entrance) or Medical Supply Airlock (MSA). The improved environment control units (ECU) are required to improve the transportability of the Portable Collective Protective Shelter (PCPS). PCPS is deployed as an interim to Joint Transportable Collective Protection System (JTCOPS) for the Marine Corps.

JUSTIFICATION: FY01 JCPE funds will be used to initiate procurement of more efficient and cost effective airlocks and to install improved ECUs.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(JN0017) JOINT COLLECTIVE PROT SYSTEMS & IMPROVEMENTS

Program Elements for Code B Items:

0604384BP, Project C05

Code:

B

Other Related Program Elements:

RD&E Code B Item

Joint Collective Protection Equipment (JCPE) provides needed improvements and cost saving standardization to currently fielded systems.

JCPE: FY00 - \$2.4; FY01 - \$2.6; FY02 - \$2.5; FY03 - \$2.3; FY04 - \$2.4; FY05 - \$2.5

FY00 - Perform program planning and project management. Develop program documentation and coordinate program with Joint Service Integrated Product Team (IPT) representatives. Perform tradeoff analysis to improve standard carbon filters and motor-blowers. Begin redesign of Fixed Installation Filter (FIF) to reduce production costs. Begin development of improved 200 Cubic Feet per Minute (CFM) Particulate filter to extend filter life. Develop and test Acceptance Tester for Recirculation Filter Unit (RFU) used on Modular Collective Protection Equipment and Chemically Protected Deployable Medical Shelter System. Begin development of lightweight Environmental Control Unit (ECU) for transportable collective protection systems. Complete performance testing of ECU to improve the performance of the Portable Collective Protection System (PCPS).

FY01 - Perform program planning and project management. Develop program documentation and coordinate program with Joint Service Integrated Product Team (IPT) representatives. Begin development of improved carbon filters to extend service life and reduce production costs. Complete prototype development and test improved 200 CFM and FIF filters. Begin development and test of improved motor-blowers to improve efficiency, reliability, size, and weight. Continue development and testing of lightweight ECU for transportable collective protection systems.

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0017) Improved Airlock

MODELS OF SYSTEM AFFECTED: Air Force Collective Protection Shelter Systems

DESCRIPTION/JUSTIFICATION:

DESCRIPTION: The Bump-Through-Door (BTD) airlock design has been developed by modifying existing hardware used for Air Force transportable collective protection by Pacific Air Forces (PACAF), HQ Air Force Special Operations Command (AFSOC), and HQ Air Mobility Command (AMC). The design consists of two sets of modified bump-through-doors (inner and outer) which allow for easy entrance and exit, a modified vestibule liner, and a recirculation filter blower. The U. S. Army Natick Soldier Support Center will accomplish the modifications necessary to the BTD sets and provide the kit (components) necessary for field modifications.

JUSTIFICATION: The BTD airlock is required to process more personnel at a faster rate. It will replace the ambulatory airlock and the Tunnel Airlock for Litter Patients (TALP) when used with hospital applications and to replace the ambulatory airlock (protective entrance) or Medical Supply Airlock (MSA) in the systems used by PACAF, AFSOC, and AMC. The current estimate is 10 to 15 people could simultaneously process through this airlock with a dwell time of only 3 minutes.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
Development initiated under Chemically Hardened Air Transportable Hospital (CHATH) program		Jun 98
Second Prototype evaluated at Holloman AFB, NM		Apr 99
Purchase Government Furnished Material	Jan 00	
Production contract for BTD M-28 type liner	Mar 00	
Begin Delivery of Bump-Through-Door Assemblies	Dec 00	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals												8	8	8	8	10	10			
Inputs																				
Outputs													11	11	10		10	10		

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs																					52
Outputs																					52

METHOD OF IMPLEMENTATION:	Field Modification	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	8 Months
Contract Dates:	FY 1999	FY 2000	01/00	FY 2001	01/01
Delivery Date:	FY 1999	FY 2000	09/00	FY 2001	08/01

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0017) Improved Airlock

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E																				
PROCUREMENT																					
Kit Quantity																					
Installation Kits					32	0.1	20	0.1											52	0.2	
Installation Kits, Nonrecurring																					
Equipment						0.4		0.2													0.6
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other						0.1		0.1													0.2
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits							32	0.1											32	0.1	
FY 2001 Eqpt -- Kits									20	0.1									20	0.1	
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Equip-Kits							32	0.1	20	0.1										52	0.2
Total Procurement Cost						0.6		0.5		0.1											1.2

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0017) Improved Environmental Control Unit

MODELS OF SYSTEM AFFECTED: Portable Collective Protective Shelter (PCPS)

DESCRIPTION/JUSTIFICATION:

DESCRIPTION - Environmental Control Units (ECUs) control the temperature inside transportable protective shelter systems. ECUs must be efficient, lightweight, and cost effective.

JUSTIFICATION - The current Portable Collective Protective Shelter was not procured with an ECU. PCPS is deployed as an interim to the Joint Transportable Collective Protection System (JTCOPS) for the Marine Corps.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
Field Deployable Environmental Control Unit (FDECU) developed by AAC/WMO Eglin AFB		FY 1998
Power Factor Correction System for A/E 32G-39 ECU developed by AAC/WMO Eglin AFB		FY 1999

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals												11	12	13	14					
Inputs																				
Outputs													11	12	13	14				

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		50
Outputs																		50

METHOD OF IMPLEMENTATION:	Depot Field team	ADMINISTRATIVE LEADTIME:	2	PRODUCTION LEADTIME:	8
Contract Dates:	FY 1999	FY 2000	12/99	FY 2001	
Delivery Date:	FY 1999	FY 2000	7/00	FY 2001	

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0017) Improved Environmental Control Unit

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E						0.5														
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment					50	0.3														50	0.3
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data						0.1															0.1
Training Equipment																					
Support Equipment																					
Other						0.2	0.2														0.4
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits							50	0.4												50	0.4
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Equip-Kits							50	0.4												50	0.4
Total Procurement Cost						0.6	0.6														1.2

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0017) Improved Motor Blowers

MODELS OF SYSTEM AFFECTED: Collective Protection Shelters

DESCRIPTION/JUSTIFICATION:

DESCRIPTION - All collective protection systems require an air movement device to move ambient air through the NBC air filtration and introduce it to the application at a higher than ambient pressure. Modular Collective Protection Equipment (MCPE), M20A1 Simplified Collective Protection Equipment (SCPE), and Chemically Hardened Air Transportable Hospital (CHATH) use electric motor/blowers to move ambient air through NBC filters.

JUSTIFICATION - Current motor/blower assemblies have proven unreliable, difficult to interface with portable generators in large numbers, and produce excessive noise. Motor/blowers with improved efficiency, reduced procurement costs, and reduced size and weight are needed to meet collective protection requirements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
Tradeoff analysis, market survey, performance specification		FY 00
Preliminary testing of improved motor/blowers		FY 01
Obtain Configuration Board Approval, finalize performance specification		FY 02
Conduct performance testing		FY 03
Initiate procurement of improved motor/blowers		FY 04

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs																				
Outputs																				

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs							25	25	25	25	25	25	25	25				200
Outputs								25	25	25	25	25	25	25	25			200

METHOD OF IMPLEMENTATION:	Field Modification	ADMINISTRATIVE LEADTIME:	PRODUCTION LEADTIME:
Contract Dates:	FY 1999	FY 2000	FY 2001
Delivery Date:	FY 1999	FY 2000	FY 2001

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0017) Improved Motor Blowers

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E						0.5		0.6		0.9		0.8		0.8		0.8				
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment													100	2.1	100	2.1				200	4.2
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other														0.3		0.3					0.6
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits													25	0.1	75	0.1				100	0.2
FY 2005 Eqpt -- Kits															25	0.1	75	0.1		100	0.2
TC Equip-Kits																					
Total Equip-Kits													25	0.1	100	0.2	75	0.1		200	0.4
Total Procurement Cost														2.5		2.6		0.1			5.2

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: (JN0017) Improved Filters

MODELS OF SYSTEM AFFECTED: Collective Protection Systems

DESCRIPTION/JUSTIFICATION:

DESCRIPTION - One of the fundamental components of a collective protection system is the filter that removes the NBC contaminant from the ambient air stream. Current particulate filter life is based on the increase in pressure drop that a system can handle before performance is degraded below an acceptable limit. Installation performed by end user at no cost to the program.

JUSTIFICATION - This effort procures HEPA filters developed as a result of a pre-planned product improvement to meet collective protection requirements for increased filter service life. Improved NBC particulate filters and particulate/gas filter sets are for Chemically Hardened Air Transportable Hospital (CHATH), Selected Area Collective Protection System (SACPS), Modular Collective Protection Equipment (MCPE), Shipboard Collective Protection System (SCPS), and fixed sites.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
Extend 100 & 200 CFM HEPA filter service life and develop performance specification	FY 00-02	
Develop, test, and implement 200 CFM HEPA pre-filter	FY 00-03	
Reduce filter costs through evaluation of manufacturing methods	FY 00-04	
Standardize HEPA filter use across services	FY 01-05	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs																		146	146	146
Outputs																		146	146	146

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	147	172	172	173	173	50	50	50	50	50	50	50	50					1675
Outputs	147	172	172	173	173	50	50	50	50	50	50	50	50					1675

METHOD OF IMPLEMENTATION:	Field Modification	ADMINISTRATIVE LEADTIME:	PRODUCTION LEADTIME:
Contract Dates:	FY 1999	FY 2000	FY 2001
Delivery Date:	FY 1999	FY 2000	FY 2001

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): (JN0017) Improved Filters

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E						1.4		1.5		1.6		1.5		1.6		1.7			
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment									585	0.5	690	0.6	200	0.1	200	0.1			1675	1.3
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other										0.1		0.1		0.1		0.1				0.4
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- Kits									438			147								585
FY 2003 Eqpt -- Kits												517								690
FY 2004 Eqpt -- Kits													173							200
FY 2005 Eqpt -- Kits														150	50					200
TC Equip-Kits															150		50			200
Total Equip-Kits									438		664		323		200		50			1675
Total Procurement Cost										0.6		0.7		0.2		0.2				1.7

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(R12301) CB PROTECTIVE SHELTER (CBPS)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	29	12	47	37	30	26	38	37	45	44	Continuing	Continuing
Gross Cost	16.3	5.2	19.2	16.3	13.9	11.5	16.4	16.4	20.5	20.6	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	16.3	5.2	19.2	16.3	13.9	11.5	16.4	16.4	20.5	20.6	Continuing	Continuing
Initial Spares												
Total Proc Cost	16.3	5.2	19.2	16.3	13.9	11.5	16.4	16.4	20.5	20.6	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Chemical Biological Protective Shelter (CBPS) is a new system designed to replace the M51 Chemical Protective Shelter. It consists of a Lightweight Multipurpose Shelter (LMS) mounted on an Expanded Capacity High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) variant and a 300 square foot soft shelter. The CBPS provides a contamination free, environmentally controlled working area for medical, combat service, and combat service support personnel to obtain relief from the continuous need to wear chemical-biological protective clothing for greater than 72 hours of operation. All ancillary equipment required to provide protection, except the generator, is mounted within the shelter.

JUSTIFICATION: The M-51 Shelter System currently in use is obsolete, lacks sufficient usable floor space, degrades mobility, and requires excessive time for set up and teardown. There is a critical need for medical functions requiring the removal of individual protective clothing and masks. The Army needs a highly mobile, self-contained collective protection system which can provide a contamination free working area for Echelon I and II medical treatment facilities and other selected units. The CBPS will satisfy this need. FY01 will procure 26 systems. Total procurement will support fielding of 339 of 572 required to support a two Major Theater of War (MTW) scenario.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(R12301) CB PROTECTIVE SHELTER (CBPS)

Program Elements for Code B Items:

PE 0604384BP, Project MC5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

The CB Protective Shelter replaces the M51 CB Shelter and provides increased mobility, reduced system weight and increased floor space.

FY98 and prior RDTE \$21.2M

The current development and test status is as follows:

DT&E - Sep 94

Logistics Demonstration - Aug 97

IOT&E-Phase I - Feb - Apr 98

Production Verification Test - Sep 98

Customer User Test - Aug 99 to resolve doctrinal issues and support limited release of production systems in FY00.

IOT&E-Phase II - Jul 00, which will validate issues identified at IOT&E-Phase I, and is required to support Type Classification Standard. TDP is available. A type classification (TC) limited procurement (TCLP) urgent was approved for Service use in Dec 94 for up to 152 systems. The projected date for TC-standard Service use is 2QFY01 and will support FY01 procurements..

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (R12301) CB PROTECTIVE SHELTER (CBPS)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. CB Protective Shelter		B				10268	37	277.513	8700	30	290.000	7706	26	296.384
2. Other Equipment														
HMMWV						2294	37	62.000	1910	30	63.666	1656	26	63.692
High Mobility Trailer						296	37	8.000	240	30	8.000	208	26	8.000
LMS						851	37	23.000	690	30	23.000	598	26	23.000
10KW TQG						407	37	11.000	362	30	12.066	314	26	12.076
NBC Filters						215	37	5.810	180	30	6.000	156	26	6.000
3. Engineering														
Government						730			898			632		
Contractor						480			640					
4. Data						252			90					
5. First Article Test														
6. Refurbishment of Test Vehicles														
7. Initial Spares						518								
8. System Fielding Support									200			200		
TOTAL						16311			13910			11470		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (R12301) CB PROTECTIVE SHELTER (CBPS)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CB Protective Shelter FY 98	Engineered Air Systems, St. Louis, MO	FFP/Option	SBCCOM, Natick, MA	Jan-99	Aug-00	47	387334	Yes		
FY 99	Engineered Air Systems, St. Louis, MO	FFP/Option	SBCCOM, Natick, MA	Jan-99	Mar-01	37	387334	Yes		
FY 00	Engineered Air Systems, St. Louis, MO	FFP/Option	SBCCOM, Natick, MA	Aug-00	Aug-01	30	402740	Yes		
FY 01	Engineered Air Systems, St. Louis, MO	FFP/Option	SBCCOM, Natick, MA	Apr-01	Jan-02	26	409150	Yes		

REMARKS:

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(GP2000) CONTAMINATION AVOIDANCE

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	71.4	87.6	59.0	101.8	107.4	175.1	159.9	137.8	157.9	174.8	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	71.4	87.6	59.0	101.8	107.4	175.1	159.9	137.8	157.9	174.8	Continuing	Continuing
Initial Spares												
Total Proc Cost	71.4	87.6	59.0	101.8	107.4	175.1	159.9	137.8	157.9	174.8	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Contamination Avoidance encompasses detection, warning and reporting, and reconnaissance systems. In the area of chemical and radiological detection, the program procures point and remote (stand-off) detection systems, to include the M22 Automatic Chemical Agent Alarm (ACADA) which is more sensitive and responsive than current detectors and is capable of concurrent nerve and blister agent detection, the shipboard Improved (Chemical Agent) Point Detection System (IPDS) providing an upgrade to current capability by automatically detecting low concentrations of both blister and nerve agents, the Pocket Radiac (AN/UDR-13) a tactical radiation dosimeter and ratemeter which provides a first time capability to both detect and indicate an immediate event and residual radiation doses received by troops, the Improved Chemical Agent Monitor (ICAM) a hand-held, soldier operated device for monitoring chemical agent contamination on personnel and equipment, which provides a mission essential capability for monitoring nerve and blister agents contamination, and the Shipboard Automatic Liquid Agent Detector (SALAD) an externally mounted point detector that will detect liquid forms of blister and nerve agents. In the warning and reporting area, the Joint Warning and Reporting Network (JWARN) provides a first time capability to the warfighter and battle space commanders to fully automate the NBC detection and warning process throughout the battlespace. The NBC Reconnaissance System (NBCRS) Block I modification provides an upgrade to the current Army and Marine Corps M93A1 system to meet all Operational Requirements, and reduces crew size to three. The NBCRS Block II modification starts in FY03 and will add newly developed detectors that allow remote chemical detection on the move, biological detection, improved chemical detection, and improved digitization/communication. The Joint Service Lightweight NBCRS (JSLNBCRS) supports the Marine Corps, Army, and Air Force future Joint field reconnaissance on the battlespace.

JUSTIFICATION: Contamination Avoidance is the primary objective of the Joint NBC Defense program. Operational forces have an immediate need to safely operate, survive and sustain operations in a NBC agent threat environment. Contamination Avoidance is highly desirable to maintain operational efficiency and minimize the need to decontaminate vehicles, equipment and areas. Advanced chemical defensive equipment is required to enhance U.S. capability to detect and identify threat agents on the battlespace.

Exhibit P-40M, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(GP2000) CONTAMINATION AVOIDANCE

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description

Fiscal Years

OSIP NO.	Classification	PRIOR	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
NBCRS Block I Maintainability											
NA	Mission Capability	128.4	25.9	24.7	31.6	6.4	0.0	0.0	0.0	0.0	217.0
NBCRS Block II											
NA	Mission Capability	0.0	0.0	0.0	0.0	0.0	5.5	34.3	35.4	36.0	111.2
Improved Point Detection System											
NA	Mission Capability	15.5	7.3	8.6	4.7	4.7	4.7	0.0	0.0	5.3	50.8
Shipboard Automatic Liquid Agent Detector											
NA	Mission Capability	0.0	0.7	2.8	2.7	4.5	3.9	5.7	1.5	20.7	42.5
Totals		143.9	33.9	36.1	39.0	15.6	14.1	40.0	36.9	62.0	421.5

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (GP2000) CONTAMINATION AVOIDANCE			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
RADIAC - Pocket AN/UDR - 13						3241			2875			3079		
Joint Warning and Reporting Network (JWARN)						10107			8939			9035		
Guard and Reserve Equipment						14557			8695			1164		
Auto Chemical Agent Alarm (ACADA), M22						29437			36923			49356		
RECON System, FOX NBC (NBCRS) MODS						25873			24716			31552		
Joint Service Ltwt NBC Recon												60702		
Shipboard Detector Modifications						8078			11421			7406		
Improved Chemical Agent Monitor						9403			12685			12762		
System Fielding Support/Spares						1060			1099					
TOTAL						101756			107353			175056		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(B96801) RADIAC - POCKET AN/UDR - 13

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	4117	4995	4253	3768	3151	3069	4514	10511	0	0	0	38378
Gross Cost	3.6	3.4	3.2	3.2	2.9	3.1	4.1	7.8	0.2	0	0	31.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	3.6	3.4	3.2	3.2	2.9	3.1	4.1	7.8	0.2	0	0	31.5
Initial Spares												
Total Proc Cost	3.6	3.4	3.2	3.2	2.9	3.1	4.1	7.8	0.2	0	0	31.5
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The AN/UDR-13 (Pocket Radiac) is a tactical radiation dosimeter and ratemeter. The Pocket Radiac provides a first time capability to measure and directly read cumulative dose from both prompt (neutron and gamma) and fallout (residual gamma) radiation. The Pocket Radiac continuously accumulates dose data and can independently display either total dose or dose rate when activated. Its pocket size (less than 2.54 cm by 12.7 cm) and weight (approximately 9.5 oz.) permits convenient use by dismounted soldiers. Programmable warning alarms are provided for both the total dose and dose rate functions.

JUSTIFICATION: The fielded AN/UDR-13 replaces 40 year old and obsolete fielded equipment (IM-93) which can not measure prompt radiation and has significantly less accuracy than the AN/UDR-13. The AN/UDR-13 also measures much lower doses than the IM-93 which makes it much more usable in Low Level Radiation Environments. (ROC, CARDS #1206P, Approved Jul 91). FY01 funds continue acquisition to meet operational requirements.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (B96801) RADIAC - POCKET AN/UDR - 13			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Item Hardware		A				1762	2859	0.616						
2. Item Hardware (New Contract)		A				576	909	0.633	1998	3151	0.634	1946	3069	0.634
3. Acceptance Test														
4. Engineering Change Test						100			50			50		
5. Special Tooling						100								
6. Engineering Support (Gov't)						341			450			450		
7. Quality Assurance						362			377			381		
8. System Fielding (Total Package Fielding, First Destination Transportation & New Equipment Training)												252		
TOTAL						3241			2875			3079		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (B96801) RADIAC - POCKET AN/UDR - 13
---	---------------------	---

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Item Hardware FY 99	Nuclear Research Corp., Dover, NJ	C/FP-4(4)	CECOM	Nov-98	Feb-99	2859	616	Yes		
	Nuclear Research Corp., Dover, NJ	C/FP-5(1)	CECOM	Dec-98	Jun-99	909	634	Yes		Aug-98
FY 00	Nuclear Research Corp., Dover, NJ	C/FP-5(2)	CECOM	Nov-99	May-00	3151	634	Yes		
FY 01	Nuclear Research Corp., Dover, NJ	C/FP-5(3)	CECOM	Nov-00	May-01	3069	634	Yes		

REMARKS:

FY 01 / 02 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
(B96801) RADIAC - POCKET AN/UDR - 13

Date:
FEBRUARY 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 99												Fiscal Year 00												L A T E R
							Calendar Year 99												Calendar Year 00												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	
POCKET RADIAC	1	FY 95	A	4117	4117																										
POCKET RADIAC	1	FY 97	A	5380	3887	1493	1493																								
POCKET RADIAC	1	FY 98	A	4253		4253	187	1361	1000	1000	705																				
POCKET RADIAC	1	FY 99	A	2859		2859		A			531	1000	1000	328																	
POCKET RADIAC	1	FY 99	NG	852		852		A					500			352															
POCKET RADIAC	2	FY 99	A	909		909			A					909																	
POCKET RADIAC	2	FY 00	A	3151		3151											A					262	262	262							
POCKET RADIAC	2	FY 00	NG	984		984												A				238	237	249							
POCKET RADIAC	2	FY 01	A	3069		3069																									
POCKET RADIAC	2	FY 01	NG	180		180																									

O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E
T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Nuclear Research Corporation, Dover, NJ	100	1000	2000	5	1	INITIAL	3	1	13	14	- Guard and Reserve equipment funding shown separately. (See JA0004) - FY99 NG for RAID II (352) MOD awarded Aug99.
						2	REORDER	2	1	4	5	
2	Nuclear Research Corporation, Dover, NJ	100	1000	2000	5	2	INITIAL	2	2	7	9	
						3	REORDER	3	1	7	8	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(G47101) JOINT WARNING & REPORTING NETWORK (JWARN)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	7.0	0	10.1	8.9	9.0	11.7	10.6	12.2	12.3	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	7.0	0	10.1	8.9	9.0	11.7	10.6	12.2	12.3	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	7.0	0	10.1	8.9	9.0	11.7	10.6	12.2	12.3	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Joint Warning & Reporting Network (JWARN) will provide standard integration and analysis of Nuclear Biological Chemical (NBC) detection information with Command, Control, Communications and Computers Information and Intelligence (C4I2) on the battlespace, automating the NBC warning and reporting processes currently performed manually throughout the Services. The JWARN will collectively consist of: Commercial Off the Shelf (COTS) materiel and JWARN software for C4I2. The JWARN is being developed for deployment with NBC detectors in the following battlespace applications: combat and armored vehicles, tactical vehicles, vans, shelters, shipboard application, area warning, semi-fixed sites, and fixed sites. The JWARN materiel consists of: a Display/Control for operator and subsystem interfaces; interfaces (known as universal and communications interface units) which link together to form an "Interface Architecture;" a Sample Transfer System designed to function with existing chemical detectors, e.g. the Telemetry Link Radio for area warning and fixed site NBC detector operations; Personnel Alarms; and, installation kits to mount components and tailor the Software Version 3 JWARN for specific hosts. The JWARN interfaces with the ACADA/NDI, the AN/VDR-2 RADIAC Set, the M21 Remote Standoff Chemical Agent Alarm, the Lightweight Standoff Chemical Agent Detector (LSCAD), NBC Reconnaissance System (NBCRS) sensors, Joint Biological Point Detection System (JBPDS), meteorological and communications equipment; other existing and developmental NBC detectors, existing and future command and control radios, appliques, vehicle navigation systems, collective protection equipment, and NBC analysis software. The JWARN will monitor and display NBC information received from the NBC detectors or via C4I2 and will automatically format and transmit compatible NBC reports within C4I2. Phase I was the initial acquisition and fielding of COTS and Government-Off-The-Shelf software to standardize NBC warning and reporting throughout the Armed Forces. Phase II will integrate NBC legacy future detector systems NBC Warning and Reporting Software Modules, and NBC Battlefield Management Modules in the Joint Services C4I systems. Additionally, detectors currently under development will be considered, based on schedule for integration into the program.

JUSTIFICATION: The JWARN provides a first-time capability to the warfighter and battlespace commanders to fully automate the NBC detection and warning process throughout the battlespace. The present operational doctrine requires soldiers to stop performing their current task, manually prepare an NBC report, and verbally transmit the report up the chain of command. This process is extremely slow, prone to data errors, and does not provide adequate early warning throughout the battlespace, resulting in high casualties. The JWARN will automatically format digital NBC reports, employ C4I2 and feed the NBC contamination information into the digitized battlefield. In addition, the JWARN will provide a first-time capability to employ chemical detectors within combat and armored vehicles and tactical vans and shelters to allow an inside and outside sampling capability. JWARN will reduce warfighter casualties and eliminate a large NBC data gap existing in the services efforts to automate the processing of battlefield data for commanders. FY01 will procure software/hardware components for JWARN.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(G47101) JOINT WARNING & REPORTING NETWORK (JWARN)

Program Elements for Code B Items:

0604384BP, Project CA5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

The JWARN will facilitate uniform integration and analysis of NBC detection with C4I2. JWARN will provide new capability for the digital battlespace.

FY98 and Prior - \$58.1M, FY99 - \$5.6M, FY00 - \$10.9, FY01 - \$7.3, FY02 - \$7.4, FY03 - \$5.5.

FY98

2Q - Phase I MS I/III

FY00

1Q - Phase II DT & Integration

FY01

1Q - Phase II DT/OT

3Q - Phase II MS III

4Q - Phase II IOC

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (G47101) JOINT WARNING & REPORTING NETWORK (JWARN)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
JWARN (MICAD) Component		A				6744	128	52.687						
First Article Test (FAT)						507								
Production Verification Test (PVT)						1002								
Tooling						131								
Quality Assurance						154								
Packaging						160								
JWARN Phase I New Equipment Training						1409								
JWARN Phase II		B										8223	516	15.936
Interface Software									2876					
Hard Wire Interface									1512					
RF Interface									4500					
FAT												500		
Quality Assurance									51			312		
NOTE: Program is in two phases: Phase I - software procurement; Phase II - procurement of interfaces for various detectors/systems.														
TOTAL						10107			8939			9035		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (G47101) JOINT WARNING & REPORTING NETWORK (JWARN)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
JWARN (MICAD) Component FY 99	Lockheed Martin, Glendale, CA	C/FFP	SBCCOM, APG, MD	Aug-99	Sep-99	128	52687	Yes		Jan-98
JWARN Phase II FY 01	TBS	C/FFP	MARCORSYSCOM, Quantico, VA	May-01	Sep-01	516	15937	Yes		

REMARKS: Contract award was delayed due to the Milestone III decision, which was for limited production only. No additional MICADs are programmed for procurement.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(JA0004) GUARD & RESERVE EQUIPMENT

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0	0	0	14.6	8.7	1.2	0	1.2	0	1.2	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	14.6	8.7	1.2	0	1.2	0	1.2	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	14.6	8.7	1.2	0	1.2	0	1.2	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This program funds for the acquisition of Chemical and Biological Defense equipment to support the Reserve Component (RC) unit requirements as outlined in the RC Weapons of Mass Destruction (WMD) Plan. Initiates equipping (1) WMD Rapid Assessment Initial Detection (RAID) Teams to provide on-site rapid response elements at the state level, (2) RC chemical companies and medical patient decontamination teams to augment hospital patient decontamination capabilities, and (3) ARNG and Army Reserve chemical elements with initial-complement equipment required for RC deployment for WMD Reconnaissance. Program equipment deliveries are displayed on the schedules for appropriate items.

JUSTIFICATION: DOD currently deploys the Marine Corps Chem/Bio Incident Response Force (CBIRF), the Army's Technical Escort Unit, and other Chem/Bio and medical assets to assist civil authorities respond to WMD incidents. In order to respond to the emerging terrorist threat of Chem/Bio attacks on American cities, this effort allows for the equipping of Reserve Component units to provide enhanced response capabilities and to provide for additional support to communities in emergency and disaster situations. This effort will allow for selected National Guard and other reserve component units to respond to and contain the effects of CB incidents in this country.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (JA0004) GUARD & RESERVE EQUIPMENT			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. M40 Chemical Mask *						24	270	0.089	41	459	0.090			
2. ICAM*						1488	414	3.595	1539	342	4.501	405	90	4.501
3. ICAM Simulator*						1305	138	9.457	1110	111	10.001	450	45	10.001
4. ACADA*						3550	438	8.106	2745	298	9.212			
5. Pocket RADIAC*						540	852	0.634	661	984	0.672	121	180	0.673
6. Alpha RADIAC						1150	214	5.374	1291	238	5.425			
7. Beta RADIAC						361	214	1.687	421	238	1.769			
8. C2A1 Canister Refill						3	270	0.012	28	1571	0.018			
9. Training Support						1958			417			60		
10. Fielding Support						1106			442			128		
11. Chem Def Suits and Equipment						3072								
* Production schedules appear on individual program P-21s. Difference in unit costs includes associated items and support.														
TOTAL						14557			8695			1164		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1036	1040	1570	3575	4233	6721	0	0	0	0	0	18175
Gross Cost	9.5	9.7	15.7	29.4	36.9	49.4	0.5	0.1	0	0	0	151.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	9.5	9.7	15.7	29.4	36.9	49.4	0.5	0.1	0	0	0	151.3
Initial Spares												
Total Proc Cost	9.5	9.7	15.7	29.4	36.9	49.4	0.5	0.1	0	0	0	151.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Automatic Chemical Agent Alarm/Non-Developmental Item (ACADA/NDI) is a man-portable automatic alarm system capable of detecting blister and nerve agents/vapors. The ACADA/NDI has improved agent sensitivity, response time, and interference rejection. The ACADA/NDI operates with no human interference after system start-up, detects automatically for a minimum of 24 hours, provides audio and visual alarms, and has a communication interface to support battlespace automation systems. The ACADA/NDI meets the critical needs of the US Forces for an automatic point sampling chemical agent alarm. A shipboard ACADA variant was developed to operate under shipboard specific environments.

JUSTIFICATION: FY01 funding will procure ACADA/NDI units for Army, Air Force, Navy and Marines, supporting the Services modernization programs. The ACADA/NDI buy provides a first time point detection capability to automatically detect blister agents. The ACADA/NDI will allow battlespace commanders to use information obtained to make rapid and effective decisions concerning adjustment of the protective posture of their soldiers.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22

Program Elements for Code B Items:

0604384BP, Project CA5

Code:

B

Other Related Program Elements:

RDT&E Code B Item

Preplanned Product Improvement (P3I) to M22 Automatic Chemical Agent Alarm (ACADA) for Surface Sampler provides first time capability to detect agents/vapor on surface at cold temperatures.

FY98 & Prior - \$1.92M, FY99: \$0.3M.

The current development and test status is as follows:

DT/OT - Nov 99 - Dec 99.

Technical Data Package - Jan 00.

Type Classification - Mar 00.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware - M22		A				28771	3575	8.047	30672	4233	7.245	46914	6721	6.980
Engineering Support						500			580			600		
Quality Assurance Support						62			350			350		
Technical Data Package, ECPs						100			140			100		
M42 Vehicle Mount Brackets						4			22			2		
System Fielding Support									200			951		
Hardware - XM279 Surface Samplers		B							21	30	0.700	189	270	0.700
PVT - Surface Sampler									500			250		
Shipboard Detectors														
Hardware- Ship ACADA		B							3338	230	14.513			
First Article Testing									25					
Technical Data									75					
Logistics									100					
Engineering Change Proposals									50					
System Fielding (Total Package Fielding, First									200					
Destination Transportation & New Equipment														
Training)														
Engineering Support Acceptance Testing									500					
Contract Administration									150					
TOTAL						29437			36923			49356		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (M98801) AUTO CHEMICAL AGENT ALARM (ACADA), M22					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware - M22 FY 99	Graseby Dynamics, LTD, Watford, UK	FFP/Option3	SBCCOM	Dec-98	Apr-99	3575	8047	Yes		
FY 00	Graseby Dynamics, LTD, Watford, UK	FFP/Option4	SBCCOM	Dec-99	Apr-00	4233	7246	Yes		
FY 01	TBS	C/FFP	SBCCOM	Nov-00	Mar-01	6721	6980	Yes		Jul-00
Hardware - XM279 Surface Sampler FY 00	SBCCOM, Edgewood, MD	In house	SBCCOM	Apr-00	Jul-00	30	700	Yes		
FY 01	SBCCOM, Edgewood, MD	In house	SBCCOM	Dec-00	Mar-01	270	700	Yes		
Hardware - Ship ACADA FY 00	Science and Tech Research, Inc., Fulton, MD	SS(8A)/FFP	Fulton, MD	Apr-00	Sep-00	230	14513	Yes		

REMARKS: FY96 through FY00 programs are priced options to the Graseby Dynamics, LTD contract awarded Dec 95. FY01 new contract.

First production of XM279 Surface Sampler in FY00. A market survey was issued and no viable vendor was found, so production was brought in house.

The shipboard ACADA variant has a different engineering design. A new contract will be used to meet the shipboard specific requirements.

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(MA0601) RECON SYSTEM, FOX NBC (NBCRS) MODS

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	8	30	12	12	11	13	1	2	16	15	Continuing	Continuing
Gross Cost	46.8	56.3	25.3	25.9	24.7	31.6	6.3	5.5	34.3	35.4	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	46.8	56.3	25.3	25.9	24.7	31.6	6.3	5.5	34.3	35.4	Continuing	Continuing
Initial Spares												
Total Proc Cost	46.8	56.3	25.3	25.9	24.7	31.6	6.3	5.5	34.3	35.4	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: NBC Reconnaissance Systems (NBCRS) provides nuclear and chemical sampling, detection, and warning equipment and biological sampling equipment integrated into a high speed, high mobility, armored carrier capable of performing reconnaissance on primary, secondary, and cross country routes wherever combat forces are deployed. The system contains a vehicle-mounted surface sampler, chemical mass spectrometer, chemical agent monitor, chemical agent detector alarm, radiation detection device, navigation system, secure communications, area marking and collective protection. In addition to the already fielded capabilities, the Block I modification will be capable of remote chemical vapor detection at a distance up to 5 km, will add a communications link to the digitized battlespace thus increasing warning times and improving soldier survivability, and will reduce crew size from four to three. Block II modification starts in FY03 and adds newly developed detectors that allow remote chemical detection on the move, biological detection, improved chemical detection, and improved digitization/communication.

JUSTIFICATION: FY01 Fox Block I NBCRS procurement continues legacy M93 system modification program to update and field M93A1 systems to the US Army and US Marine Corps. The M93A1 fully integrates for the first time the stand-off M21 chemical vapor detector into the mobility platform, and thus enables the crew to remotely deploy and operate the sensor from the fully protected crew compartment. The M93A1 also for the first time digitally integrates the on board NBC detection sensors, communications and navigation systems. This enhancement provides the crew commander full real time visibility into the operational status of system sensors and communications and provides the linkage to the digitized battlefield C4I architecture. The M93A1 modification also reduces the operational cost of the system by reducing the crew size to three soldiers/marines. The internal crew level human factors engineering changes improve crew workload distribution and reduces task complexity. M93A1 is being fielded under the unit level total package fielding concept, US Army FOX equipped unit fielding is in six or eight system increments and USMC equipped unit fielding is in two or four system increments.

COOPERATIVE AGREEMENT: A Cooperative Agreement between the U.S. and German governments to provide supply support and configuration management of common hardware on the NBCRS was signed on 18 Apr 95. This agreement formalizes and optimizes US Non-Developmental Item NBCRS fleet supply support and enhances system life cycle Contractor Logistic Support.

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: NBCRS Block I

MODELS OF SYSTEM AFFECTED: M93 Fox NBC Reconnaissance System

DESCRIPTION/JUSTIFICATION:

The M93 is upgraded to the M93A1 Fox NBCRS to meet Operation Requirements and reduce operations and support costs by reducing crew size to three. The M93A1 has the capability to detect chemical contamination at a distance of up to five kilometers, automatically integrate contamination information from sensors with input from on-board navigation and meteorological systems and transmit digital warning messages through the Maneuver Control System, thus increasing warning times and improving soldier survivability. A U.S. Army Chemical School study shows that the M93A1 FOX provides a significant force multiplier. Specifically, FOX equipped divisions gain the equivalent of an additional 3.8 Maneuver Companies firepower, per day, when the FOX is employed in a chemical war.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
IPR Production Decision	Jun 95	Jun 95
Production Contract Award	May 96	May 96
First Modification Delivery (FUE)	Oct 98	Oct 98
Last Modification Complete	Apr 03	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	19	6	6	6	5	5	3	2	6	6	2		4	4	4		4	4	1	
Outputs	3	3	2		6	6	6	6	6	4	4	5	6	4	1	4	4	3	3	3

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		87
Outputs	3	2																87

METHOD OF IMPLEMENTATION:	Contractor/Depot	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	18 Months
Contract Dates:	FY 1999 1/99	FY 2000 1/00		FY 2001 1/01	
Delivery Date:	FY 1999 6/00	FY 2000 6/01		FY 2001 6/02	

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): NBCRS Block I

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E		168.0				3.7														171.7
PROCUREMENT																					
Kit Quantity																					
Installation Kits	50	57.5	12	16.1	11	15.5	13	22.0	1	2.2									87	113.3	
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring		3.8																		3.8	
Engineering Change Orders		2.8		0.7		0.5		0.8												4.8	
Data		9.7																		9.7	
Training Equipment																					
Support Equipment		9.0																		9.0	
Other		34.2		5.3		5.1		4.8		0.4										49.8	
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits	42	11.4	8	2.4																50	13.8
FY 1999 Eqpt -- Kits			5	1.4	7	2.2														12	3.6
FY 2000 Eqpt -- Kits					5	1.4	6	2.4												11	3.8
FY 2001 Eqpt -- Kits							5	1.6	8	3.5										13	5.1
FY 2002 Eqpt -- Kits									1	0.2										1	0.2
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Equip-Kits	42	11.4	13	3.8	12	3.6	11	4.0	9	3.7										87	26.5
Total Procurement Cost		128.4		25.9		24.7		31.6		6.3											216.9

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: NBCRS Block II

MODELS OF SYSTEM AFFECTED: M93 and M93A1

DESCRIPTION/JUSTIFICATION:

Block II procurement funds begin in FY03. The Block II program is the integration of new detection hardware into the Fox chassis. Two of the major improvements are the addition of the JSLSCAD to add remote sensing of chemical agents on the move and Chemical Biological Mass Spectrometry; adding biological detection with improved chemical detection.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
Block II Modification Contract Award	Jan 03	
Block II First Article Test	Apr 04	
Block II New Materiel Release	Nov 04	
Block II First Unit Equipped	Dec 04	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs																				
Outputs																				

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs							2		4	4	4	4	4	4	4	3	15	48
Outputs								2		4	4	4	4	4	4	4	18	48

METHOD OF IMPLEMENTATION:	Contractor/Depot	ADMINISTRATIVE LEADTIME:	3 months	PRODUCTION LEADTIME:	16 Months
Contract Dates:	FY 1999	FY 2000		FY 2001	
Delivery Date:	FY 1999	FY 2000		FY 2001	

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): NBCRS Block II

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E						6.7		11.0		12.6		3.8								34.1
PROCUREMENT																					
Kit Quantity																					
Installation Kits											2	1.9	16	26.5	16	26.5	15	25.5	49	80.4	
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring												1.0								1.0	
Engineering Change Orders												0.7	0.5		0.5					1.7	
Data												1.0	1.0							2.0	
Training Equipment																					
Support Equipment																					
Other												0.9	5.7		4.0		6.0			16.6	
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits													2	0.6						2	0.6
FY 2005 Eqpt -- Kits															16	4.8				16	4.8
TC Equip-Kits																		31	4.5	31	4.5
Total Equip-Kits													2	0.6	16	4.8	31	4.5	49	9.9	
Total Procurement Cost												5.5	34.3		35.8		36.0			111.6	

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(MC0100) JT SVC LTWT NBC RECON SYS (JSLNBCRS)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	0	0	0	0	0	45	72	43	44	57	Continuing	Continuing
Gross Cost	0	0	0	0	0	60.7	97.6	67.0	60.5	69.6	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0	0	0	0	0	60.7	97.6	67.0	60.5	69.6	Continuing	Continuing
Initial Spares												
Total Proc Cost	0	0	0	0	0	60.7	97.6	67.0	60.5	69.6	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This is a Joint Service program effort between the U.S. Marine Corps, U.S. Army and U.S. Air Force. The Joint Service Lightweight Nuclear Biological and Chemical Reconnaissance System (JSLNBCRS) provides field commanders with real-time point and standoff intelligence for real-time field assessment of NBC hazards. The system will be a vehicle-mounted suite of NBC equipment/software to detect, collect, analyze, mark and disseminate NBC data. Two variants of the JSLNBCRS will be produced, a Light Armored Vehicle (LAV) and High Mobility Multipurpose Wheeled Vehicle (HMMWV), both variants will house the same equipment suite. The following equipment will be integrated into the JSLNBCRS suite: the Joint Service Lightweight Standoff Chemical Agent Detector, the Joint Point Biological Detection System, the Joint Chemical Agent Detector, the Automatic Chemical Agent Detection Alarm and proven commercially available equipment.

JUSTIFICATION: FY01 funding procures 38 HMMWV's and 7 LAV systems.

Exhibit P-40C, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:

PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature

(MC0100) JT SVC LTWT NBC RECON SYS (JSLNBCRS)

Program Elements for Code B Items:

0604384BP

Code:

B

Other Related Program Elements:

RDT&E Code B Item

RDT&E:

FY98 - \$4.3M, FY99 - \$7.1M, FY00 - \$6.5M, FY01 - \$7.9M.

FY99 Completed system design review - 2nd Qtr, FY99.

FY00 Developmental Test I and Operational Test I - 2nd Qtr, FY00.

FY01 consists of the following:

Complete technical data package and requisite acquisition documentation for Milestone III.

Complete operational testing.

Milestone III scheduled for 3rd quarter, FY01.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (MC0100) JT SVC LTWT NBC RECON SYS (JSLNBCRS)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. JSLNBCRS HMMWV Variant		B												
JSLNBCRS HMMWV Base Vehicle												2280	38	60.000
Vehicle Communication Suite												665	38	17.500
CB Mass Spectrometer												4750	38	125.000
Central Data Processing Unit												760	38	20.000
Environmental Control Unit (ECU)												1330	38	35.000
Lightweight Multipurpose Shelter												1064	38	28.000
Associated Support Items of Equipment (ASIOE)												1207	38	31.763
Contractor Integration												34481	38	907.394
2. JSLNBCRS LAV Variant		B												
JSLNBCRS LAV Base Vehicle												5280	7	754.285
Vehicle Communication Suite												123	7	17.571
CB Mass Spectrometer												875	7	125.000
Central Data Processing Unit												140	7	20.000
Environmental Control Unit												245	7	35.000
ASIOE												222	7	31.714
Contractor Integration Cost												6351	7	907.285
3. Engineering Support												467		
4. Technical Manuals												150		
5. Quality Control												312		
TOTAL												60702		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE	Weapon System Type:	P-1 Line Item Nomenclature: (MC0100) JT SVC LTWT NBC RECON SYS (JSLNBCRS)
---	---------------------	--

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
JSLNBCRS LAV Variant FY 01	TBS	C/FFP	MARCORSYSCOM, Quantico, VA	Jul-01	Jul-02	7	1890892	No		Jan-01
JSLNBCRS HMMWV Variant FY 01	TBS	C/FFP	MARCORSYSCOM, Quantico, VA	Jul-01	Jul-02	38	1224675	No		Jan-01

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(N00041) SHIPBOARD DETECTOR MODIFICATIONS

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	3.8	7.1	4.6	8.1	11.4	7.4	9.2	8.6	5.7	1.5	Continuing	Continuing
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	3.8	7.1	4.6	8.1	11.4	7.4	9.2	8.6	5.7	1.5	Continuing	Continuing
Initial Spares												
Total Proc Cost	3.8	7.1	4.6	8.1	11.4	7.4	9.2	8.6	5.7	1.5	Continuing	Continuing
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The objective of this program is to procure and install Chemical and Biological (CB) defensive systems for surface ships and Naval facilities to support the requirement to sustain operations in a CB threat environment. Systems to be fielded include:

The Improved Point Detection System (IPDS) which replaces the Chemical Agent Point Detection System MK 21 Mod 1 and provides expandable point detection of Chemical Warfare vapor agents. Milestone (MS) III occurred in 3QFY95. The program provides for the installation of IPDS on amphibious, combat, select combat support ships, Coast Guard vessels, and Naval facilities by Alteration Installation Teams headed by Naval Surface Warfare Center, Crane. The inventory objective is 269 systems.

The Shipboard Automatic Liquid Agent Detector (SALAD) which provides point detection of liquid Chemical Warfare agents. Low rate initial production (LRIP) approved in 4QFY98. LRIP contract of 6 units is scheduled for release in 1QFY00. MS III is planned for 4QFY01. The program provides for the procurement of SALAD for amphibious, combat, select combat support ships, Coast Guard vessels, and Naval facilities. The current program under this line item covers limited installations by Alteration Installation Teams headed by Naval Surface Warfare Center, Crane. Current plans call for maximizing the concurrent installation with IPDS to minimize installation costs and schedule. Inventory objective is 269 systems.

JUSTIFICATION: FY01 funds will be used to continue installation of Improved Point Detection Systems, to complete shipboard testing of the initial Shipboard Automatic Liquid Agent Detector production units and to exercise the first full rate production option of the Shipboard Automatic Liquid Agent Detector contract.

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: Improved Point Detection System

MODELS OF SYSTEM AFFECTED: To be installed on amphibious, combat, and selected combat support ships. Coast Guard vessels, and Naval Facilities.

DESCRIPTION/JUSTIFICATION:

IPDS replaces the Chemical Agent Point Detection System (CAPDS) MK 21, Mod 1 and provides greater sensitivity, faster response time, increased agent detection (nerve and blister) and is expandable for new and novel chemical warfare agent vapors. The program provides for the installation of IPDS on amphibious, combat, and selected combat support ships, Coast Guard vessels, and Naval facilities by Alteration Installation Teams headed by NSWC, Crane, IN. The inventory objective is 269.

Notes:

1. Installation costs per unit varies with installation location.
2. First article test units will be used as trainers.
3. The installation quantity columns include systems that will be installed with SCN funds, but the associated costs are not included.
4. The 26-month production lead time is due to extensive engineering change proposals early in the contract causing delays in production.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
MS III	Jun 95	Jun 95
Contract Award	Sep 96	Oct 96
First Delivery	Feb 99	Jun 99
2nd Contract Award	Jan 99	Feb 99

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals							3	18	18	18	18	18	18	18	18	18	18	18	18	18
Inputs																				
Outputs								19	16	14	15	15	15	15	15	15	15	15	15	15

	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs	18	14																		269
Outputs	15	15	15	15															10	269

METHOD OF IMPLEMENTATION:	Alteration/Installation TM	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	22 Months
Contract Dates:	FY 1999 2/99	FY 2000	3/00	FY 2001	None
Delivery Date:	FY 1999 10/01	FY 2000	4/02	FY 2001	N/A

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): Improved Point Detection System

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E		22.8																		
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment	162	9.1	40	2.1	64	3.8														266	15.0
Equipment, Nonrecurring	3	0.2																		3	0.2
Engineering Change Orders		0.5		0.1																	0.6
Data		0.1		0.1		0.1															0.3
Training Equipment																					
Support Equipment																					
Other		5.1		2.1		0.9															8.1
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits		0.5	19	2.9	60	3.8	60	4.7	26	2.0										165	13.9
FY 1999 Eqpt -- Kits									34	2.7	6	0.5								40	3.2
FY 2000 Eqpt -- Kits											54	4.2				10				64	4.2
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Equip-Kits		0.5	19	2.9	60	3.8	60	4.7	60	4.7	60	4.7					10			269	21.3
Total Procurement Cost		15.5		7.3		8.6		4.7		4.7		4.7									45.5

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE: Shipboard Automatic Liquid Agent Detector (SALAD)

MODELS OF SYSTEM AFFECTED: To be installed on amphibious, combat, selected combat support ships, Coast Guard vessels, and Naval facilities.

DESCRIPTION/JUSTIFICATION:

SALAD provides automatic point detection of liquid chemical warfare agents in a marine environment. The plan is to install the SALAD on amphibious, combat, selected combat support ships, Coast Guard vessels, and Naval facilities, maximizing concurrent installation with the IPDS to minimize installation costs and schedule. Navy will procure a total of 269 SALAD systems (including LRIP).

Notes:

1. Installation costs vary with type of ship and facility.
2. First Article Test Units will be used as trainers.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone	Planned	Accomplished
MS I/II		May 93
Low Rate of Initial Production Approval		Sep 98
RFP Available		Oct 98
Contract Award	1 QFY 00	
Full Rate Production Decision	4 QFY 01	

Installation Schedule:

Pr Yr	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs												1		1						4
Outputs												1		1						1
	FY 2003				FY 2004				FY 2005				FY 2006				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs	12	12	12	12	18	18	18	18	18	18	18	18	11	11	11	10	12	269		
Outputs	9	5															241	269		

METHOD OF IMPLEMENTATION:	Alteration/Installation TM	ADMINISTRATIVE LEADTIME:	13 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 1999	FY 2000	12/99	FY 2001	08/01
Delivery Date:	FY 1999	FY 2000	08/00	FY 2001	06/02

INDIVIDUAL MODIFICATION

Date: FEBRUARY 2000

MODIFICATION TITLE (Cont): Shipboard Automatic Liquid Agent Detector (SALAD)

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
	RDT&E		5.8																			5.8
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kits, Nonrecurring																						
Equipment					2	0.8	24	1.9	39	3.0	40	3.0	67	5.3	14	1.1	79	5.9	265	21.0		
Equipment, Nonrecurring					4	1.4													4	1.4		
Engineering Change Orders								0.1	0.1		0.1		0.1		0.1					0.5		
Data								0.1	0.4		0.1									0.6		
Training Equipment																						
Support Equipment																						
Other				0.7		0.5		0.5		0.8		0.3		0.3		0.3		0.2		3.6		
Interim Contractor Support																						
Installation of Hardware																						
FY 1998 & Prior Eqpt -- Kits																						
FY 1999 Eqpt -- Kits																						
FY 2000 Eqpt -- Kits					1	0.1	1	0.1	4	0.2									6	0.4		
FY 2001 Eqpt -- Kits											8	0.4							31	1.9	39	2.3
FY 2002 Eqpt -- Kits																			62	3.5	62	3.5
FY 2003 Eqpt -- Kits																			64	3.6	64	3.6
FY 2004 Eqpt -- Kits																			68	3.9	68	3.9
FY 2005 Eqpt -- Kits																			14	0.8	14	0.8
TC Equip-Kits																			16	0.9	16	0.9
Total Equip-Kits					1	0.1	1	0.1	4	0.2	8	0.4							255	14.6	269	15.4
Total Procurement Cost				0.7		2.8		2.7		4.5		3.9		5.7		1.5		20.7		42.5		

Exhibit P-40, Budget Item Justification Sheet

Date:

FEBRUARY 2000

Appropriation/Budget Activity/Serial No:
PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE

P-1 Item Nomenclature
(S02201) IMPROVED CHEMICAL AGENT MONITOR (ICAM)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	2984	435	1933	1927	3112	3003	0	0	0	0	0	13394
Gross Cost	4.2	3.1	9.2	9.4	12.7	12.8	0.3	0.1	0	0	0	51.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.2	3.1	9.2	9.4	12.7	12.8	0.3	0.1	0	0	0	51.8
Initial Spares												
Total Proc Cost	4.2	3.1	9.2	9.4	12.7	12.8	0.3	0.1	0	0	0	51.8
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Improved Chemical Agent Monitor (ICAM) is a hand-held, service member operated device for monitoring chemical agent contamination on personnel and equipment. The ICAM detects vapors from chemical agents on the surface by sensing the molecular ions of specific mobilities (time-of-flight) . It uses special timing and microprocessor techniques to reject interference and false alarms. The ICAM can detect and discriminate between vapors of nerve and mustard agents. The ICAM consists of a drift tube, electronics board, molecular sieve, vacuum pump, and buzzer. It includes expendables such as batteries, a battery pack, test simulant, and dust filters. The ICAM weighs five (5) pounds and measures 4" x 7" x 15".

JUSTIFICATION: FY01 funds continue production under the FY 96 multi-year contract. The ICAM is an improved version of the already-fielded Chemical Agent Monitor (CAM). The CAM provided a first time, mission essential, capability for monitoring nerve and blister agent contamination. It identifies and provides a positive indication of specific areas and relative levels of contamination hazard. The ICAM upgrades the CAM by significantly reducing maintenance burdens and improving reliability and maintainability. FY01 procures 3003 ICAMs (last year of production).

COOPERATIVE AGREEMENT: The CAM was developed by Graseby Ionics Ltd., Watford, England for the United Kingdom (UK) Ministry of Defense (MOD). The improvements leading to the ICAM were developed by Graseby for the U.S. The U.S. government has a license agreement with Graseby, which requires payment of a \$208 royalty for each of the first 30,000 units (CAM and ICAM combined). The FY96 procurement was the first competitive procurement permitted under this agreement.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/Budget Activity/Serial No. PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE			P-1 Line Item Nomenclature: (S02201) IMPROVED CHEMICAL AGENT MONITOR (ICAM)			Weapon System Type:			Date: FEBRUARY 2000			
Weapon System Cost Elements		ID	FY 99			FY 00			FY 01					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. ICAM Hardware		A				6926	1927	3.594	9600	2984	3.217	9238	3003	3.076
2. Royalty Payment (Graseby)						401			621			625		
3. Batteries						87			137			141		
4. Battery packs						100			159			164		
5. Replacement Assemblies									212	128	1.656			
6. CAM Training Simulator						1286	136	9.455	1166	122	9.557	1053	116	9.077
7. Engineering Support						603			790			1249		
8. System Fielding (Total Package Fielding, First Destination Transportation & New Equipment Training)												292		
TOTAL						9403			12685			12762		

Exhibit P-5a, Budget Procurement History and Planning

Date:
FEBRUARY 2000

Appropriation/Budget Activity/Serial No: PROCUREMENT DEFENSE-WIDE/3/CHEM-BIO DEFENSE		Weapon System Type:			P-1 Line Item Nomenclature: (S02201) IMPROVED CHEMICAL AGENT MONITOR (ICAM)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CAM Training Simulator										
FY 99	Argon Electronics, UK	SS/FP	SBCCOM, APG MD	Jun-99	Oct-99	136	9455	Yes		
FY 00	Argon Electronics, UK	SS/FP	SBCCOM, APG, MD	Jan-00	Jan-01	122	9558	Yes		
FY 01	Argon Electronics, UK	SS/FP	SBCCOM, APG, MD	Jan-01	Aug-01	116	9077	Yes		
ICAM										
FY 99	Intellitec, Deland, FL	C/FPM-3(3)	SBCCOM, APG, MD	Dec-98	Oct-99	1927	3594	Yes		
FY 00	Intellitec, Deland, FL	C/FPM-(OP)	SBCCOM, APG, MD	Nov-99	Jun-00	2984	3217	Yes		
	Intellitec, Deland, FL	C/FPM-(OP)	SBCCOM, APG, MD	Nov-99	Apr-01	128	1656	Yes		
FY 01	Intellitec, Deland, FL	C/FPM-(OP)	SBCCOM, APG, MD	Nov-00	May-01	3003	3076	Yes		
Royalties										
FY 99	Graseby, UK	SS/FP	SBCCOM, APG, MD	Dec-98		1927	208	Yes		
FY 00	Graseby, UK	SS/FP	SBCCOM, APG, MD	Dec-99		2984	208	Yes		
FY 01	Graseby, UK	SS/FP	SBCCOM, APG, MD	Dec-00		3003	208	Yes		

REMARKS: Royalties - See Cooperative Agreement information on P-40.

THIS PAGE INTENTIONALLY LEFT BLANK